### Magazine of the Royal Ontario Museum

Fall 2010

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WHAT MAKES THIS THE FASTEST BIRD ON EARTH? One plucky ornithologist hand-raised three chicks in her quest to find out / The Sweet Hereafter: Four cultures—four views of the afterlife / Season of Africa: El Anatsui and his shimmering art / Plus: JAMES CHATTO on what's cooking in the next world / MARK KINGWELL on how we get from here to eternity





### J. E. H. MacDonald

"Fall Woods, Algoma" c.1920  $\mid$  8.5" x 10.5"  $\mid$  oil on board

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Photo: Medford Taylor/ National Geographic Stock

World cultures: Sculpture of a female polo player, Tang dynasty, China. 690-725 CE. Photo: Brian Boyle

### **INFORMATION**

Royal Ontario Museum 100 Queen's Park Toronto, ON M5S 2C6 Switchboard: 416.586.8000 Website: rom.on.ca E-mail: info@rom.on.ca

Saturday through Thursday: 10 am to 5:30 pm; Friday: 10 am to 9:30 pm; closed Christmas Day.

### ROM LIBRARY

Public hours: Noon to 4:30 pm, Monday through Friday

### ADMISSION PRICES

ROM Members: FREE\* Adults: \$24 Students and seniors with ID: \$21 Children (4 to 14 years): \$16 Infants 3 and under: FREE

On Half-Price Friday Nights, presented by SunLife Financial, from 4:30 pm to 9:30 pm: Adults \$12; students and seniors with ID \$10.50; children \$8.

Admission, except for ticketed exhibitions. is free after 4:30 pm Wednesdays.

Admission is free on Tuesdays for postsecondary Canadian students with ID.

Museum and Arts Pass Program participant.

\*All adult Members must present a valid membership card and photo ID. Membership cards are not transferable except for RPC Members.



Francisco Alvarez
MANAGING DIRECTOR, ICC

At the ICC, Alvarez has produced thought-provoking exhibitions examining themes from street art to celebrity culture, as well as many events that generate deeper discussion of the cultural and political issues embedded in the exhibitions. This October he looks forward to the world premiere retrospective of the celebrated African artist El Anatsui. Alvarez promises that it will be one of the most important contemporary art exhibitions in Canada this year.

Why does El Anatsui use metal liquor bottle tops to create his wall pieces? This particular material apparently has a double meaning for the artist. Liquor was one of the principal products that Europeans brought in for trade during imperial times, so the bottle tops allude to a long history of economic exchange and oppression in West Africa. Simultaneously, Anatsui transforms this locally available, colourful, and resilient material into art works that express his vision as an international artist who is consciously inspired by local artistic traditions. Anatsui is careful to point out that his work is not about recycling.



### Sarah Fee ASSOCIATE CURATOR

The extraordinary range of human reaction to life's exigencies—known as "ethnographic dazzle"— is what first drew this Oxford University graduate to anthropology, and continues to feed her curiosity about world cultures. Events such as birth and death are approached in very different ways by cultures in different times and places. And yet a core of psychological commonality can often be found.

What do Madagascar's afterlife traditions tell us about ourselves? In both Egypt and Madagascar, the decay of death, considered polluting and dangerous, must be counteracted. In Egypt this is accomplished by elaborate procedures to halt decay But in highland Madagascar, decay of the flesh is accelerated, leaving the "pure" bones to be wrapped in cloth their new flesh. Correctly performing death rites and honouring ancestors reassures the elderly and channels the grief of mourners. The end result, as I experienced it, was confidence in the face of death, to the point that the elderly proudly store their pre-made coffins in the courtyard. Lessons for our own culture?



### **Gayle Gibson** TEACHER

As a child, beginning when she was 8 years old, Gibson, an Egyptologist who teaches at the ROM, would take the streetcar to the Museum almost every Sunday. At first, she was afraid of the Mummy Room. But one day she noticed an index card stating that the mummy inside the glass case was a man named Antjau. In that moment, she recognized the dry brown artifact as a fellow human, a friend. She has been studying Egypt ever since.

What do Egypt's afterlife traditions tell us about ourselves? The Ancient Egyptians believed that the distance between this world and the next was not great. The god Osiris promised that those who lived a balanced life would live forever in the next world. A good life, not an elaborate funeral, was the guarantor of this eternal life. Still, the dead did not return to set the Ancient Egyptians' hearts at ease. So, as a cure for despair, they recommended rejoicing in this life and keeping old friends in mind. Reasonable advice, I think, for any time or place.



### Nina Schaller POSTDOCTORAL RESEARCHER

After surfacing from marine biology studies in the Mediterranean, Schaller volunteered for six months at the Frankfurt Zoo. There, she met an exceptionally friendly ostrich that sparked her interest in this unique terrestrial vertebrate. For eight years, she has studied the unparalleled running performance of the largest living bird. Schaller hand-raised her own ostriches, collaborated with European universities, and worked as a visiting researcher at the ROM. Her multi-faceted approach led to the discovery of energy-conservation strategies that explain how the ostrich manages life in the fast lane.

What is the strangest thing you've seen an ostrich eat? Ostriches peck at, and occasionally swallow, anything glitzy—keys, zipper-tabs, earrings, mobile phones—without the slightest signs of malaise. Most unfortunate was the Newlywed Incident. The signs on our enclosure warning people to stay out of beak reach went unheeded by the unsuspecting bride. Her ill-fitting diamond ring was easily snatched right off her finger and swallowed by the deft bird, never to be seen again.



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### A Letter from the Chair of the Board of Trustees



### Changing of the Guard

Fall marks a time of change. The changing foliage and cooler temperatures signal the start of a new season. And at the Royal Ontario Museum, we too are experiencing our own season of change.

After a revolutionary decade of visionary leadership and dramatic transformation, we said goodbye to William Thorsell and are left with his incredible legacy. Inspired by his great spirit, we recently announced the official re-naming of the Spirit House as the Thorsell Spirit House. This special space, located at the heart of the Michael Lee-Chin Crystal, is a place for reflection and contemplation. Fittingly, William will always be remembered here as a leader who pushed us to reach higher and dream bigger.

We also welcome an exciting moment of historic change as Janet Carding steps into the role of director and CEO of the ROM-the first woman appointed to the position in the Museum's near-100-year history. A museum professional, Janet joins us from the Australia Museum in Sydney and is looking forward to leading the ROM into a new era. She is particularly interested in the potential of museums to help people explore the world around them-to challenge their perspectives and open new horizons.

Janet began her career as a curator at the Science Museum in London, England, before becoming involved in exhibition and program development as the assistant director of Public Programs and Operations at the Australia Museum. We are delighted to welcome her to the ROM and we look forward to working with her.

With a number of thrilling new openings at the Museum, it is a particularly good time of year to visit the ROM. The landmark exhibition The Warrior Emperor and China's Terracotta Army is the most accessible exhibition in the ROM's history, and the ICC's upcoming world premiere of El Anatsui: When I Last Wrote to You About Africa features more than 60 pieces of original work in this renowned artist's first career retrospective.

Change is a necessary part of life and an intrinsic aspect of our work at the ROM. We are continuously striving to engage the world by creating new exhibits, enhancing collections, and developing thought-provoking programmingall to build on and challenge our understanding and appreciation of world cultures and natural history. And, under the guidance of our new director and CEO, Janet Carding, we know that extraordinary and inspired change is just ahead.

SALVATORE M. BADALI

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Copy Editor Andrea Gallagher Ellis

Photography Brian Boyle (unless

Contributing Editors Contributing Edi Mary Burridge Denise Dias Glen Ellis Mark Engstrom Peter Kaellgren Amy Lathrop Dave Rudkin Kevin Seymour Kevin Seymour Janet Waddington

Editorial and Marketing Offices

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# Photos: El Anatsui, Plot A Plan III, 2007, courtesy Jack Shainman Gallery.

### Exhibitions and gallery openings



Pick up a copy of the richly illustrated catalogue El Anatsui: When I Last Wrote to You About Africa at the ROM Museum store

### In the Spotlight

### October 2, 2010, to January 2, 2011 Feature Exhibition

Institute for Contemporary Culture, Roloff Beny Gallery, Michael Lee-Chin Crystal, Level 4



### El Anatsui: When I Last Wrote to You About Africa

What do grain mortars, evaporated milk tin lids, cassava graters, and railway sleepers have in common? They are just some of the found objects and everyday materials that renowned Ghanaian artist El Anatsui has rendered into strikingly original works. Exhibited from Venice to Havana, his sophisticated pieces combine the diverse histories of African art with more modern influences, often taking the theme of the erosion of inherited traditions. He is widely considered one of Africa's most influential artists.

This October, the ROM's Institute for Contemporary Culture will host the debut of a 40-year retrospective of Anatsui's work. Among the 60 pieces drawn from international collections are sculptures and paintings as well as several of the shimmering massive-scale metallic tapestries for which he's most famous.

Supporting Sponsor: Moira and Alfredo Romano

Organized by the Museum for African Art, New York, and supported, in part, by grants from the National Endowment for the Arts and The Andy Warhol Foundation for the Visual Arts

### Until January 2, 2011 Ongoing Exhibition Garfield Weston Exhibition Hall,

Michael Lee-Chin Crystal, Level 2B

### The Warrior Emperor and China's Terracotta Army

A proper burial ceremony has been a matter of great importance to the Chinese since Neolithic times (about 5000 BCE). An elaborate funeral gave the spirits in the next world, as well as the mourners left behind, a clear idea of the deceased's rank. China's First Emperor pulled out all the stops to ensure his power was known in the realm of the hereafter-700,000 people worked to create his enormous tomb complex and his corps of 8,000 life-sized terracotta warriors.

Ten of these not-to-be-missed life-sized terracotta warriors and horses and hundreds of other funerary items are now on display at the ROM, the largest show of this scope to be exhibited in North America.

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terracotta figures in the exhibition, this middle-rank official is a charioteer who would have driven a battle chariot.

This exhibition was organized by the Royal Ontario Museum in partnership with the Shaanxi Provincial Cultural Relics Bureau and the Shaanxi Cultural Heritage Promotion Centre, People's Republic of China, with the collaboration of the Montreal Museum of Fine Arts, the Glenbow Museum, Calgary, and the Royal BC Museum, Victoria,



The Official **Guide to the** Exhibition \$5 (tax included)

### Until September 2011

The Patricia Harris Gallery of Textiles & Costume, Michael Lee-Chin Crystal, Level 4

### To Dye For: Fashion and Furnishing Textiles

### October 2, 2010, to March 27, 2011

Wilson Canadian Heritage Exhibition Room, Sigmund Samuel Gallery of Canada, Weston Family Wing, Level 1

**Position As** Desired: Exploring African-Canadian **Identity** 

### Until May 1, 2011 Ongoing Exhibition

Herman Herzog Levy Gallery, Philosophers' Walk Wing, Level 1

### Playful Pursuits: Chinese **Traditional Toys and Games**

Although life was undoubtedly harsh in the remote past, archaeological finds show that from very ancient times the Chinese devised ways to amuse themselves as a respite from toil. This exhibition displays some 140 artifacts related to or depicting leisure activities.

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Left: This sculpture depicting a female polo player is of glazed earthenware made during the Tang dynasty, 690-725 CE Polo was just one of many games played in China. Others included cards puzzles, dolls, kites, and board games such as Chinese chess and mahjong.

### October 9, 2010, to March 27, 2011

European Exhibition Area, Samuel European Galleries, Hilary and Galen Weston Wing, Level 3



### Fryderyk Chopin and the Romantic Piano

Polish composer Fryderyk Chopin (1810-1849), a child prodigy pianist who wrote his first musical score at age 7, earned widespread renown for his compositions, even during his own lifetime. His music is the epitome of Romanticism, a movement that embraced the idea that strong emotion could be a source of aesthetic experience. This year, the bicentennial of Chopin's birth, is the perfect time to celebrate this musical genius. Original Chopin scores as well as instruments, fashion plates, and decorative arts from the Romantic period will be on display.



Left: The Pleyel, pianoforte from the ROM's collection, was Chopin's first choice of instrument. Ignace Pleyel et Cie, Paris, France, 1823-1825

### Until November 28, 2010

### **Ongoing Exhibition**

Sir Christopher Ondaatje South Asian Gallery, Special Exhibits Case, Michael Lee-Chin Crystal, Level 3

### Ragamala: **Garland of Melodies**

A genre of South Asian miniature painting that flourished during the 16th to 19th centuries, Ragamala originated in the artistic workshops of the Rajasthani kingdoms. The painting style is actually a confluence of music, poetry, and painting: the illustrations depict poetic verses composed to accompany codified modes of classical Indian music, called ragas. Love in its myriad forms is the dominant theme.



**Left:** *Lalita Ragini* Bundi, Rajasthan, North India Opaque watercolour, gold, paper Late 17th century In music, Lalita is a morning raga in a devotional mood. In painting, it is a charming lover who is leaving or approaching his sleeping beauty. In the work on display, the lover has donned his shoes and is walking away while glancing back over the limp lotus blossom draped over his shoulder, which he takes as a souvenir.



### Until October 11, 2010 **Ongoing Exhibition**

Temporary Exhibition Space, Hilary and Galen Weston Wing, Level 2

### **House Calls** with my Camera

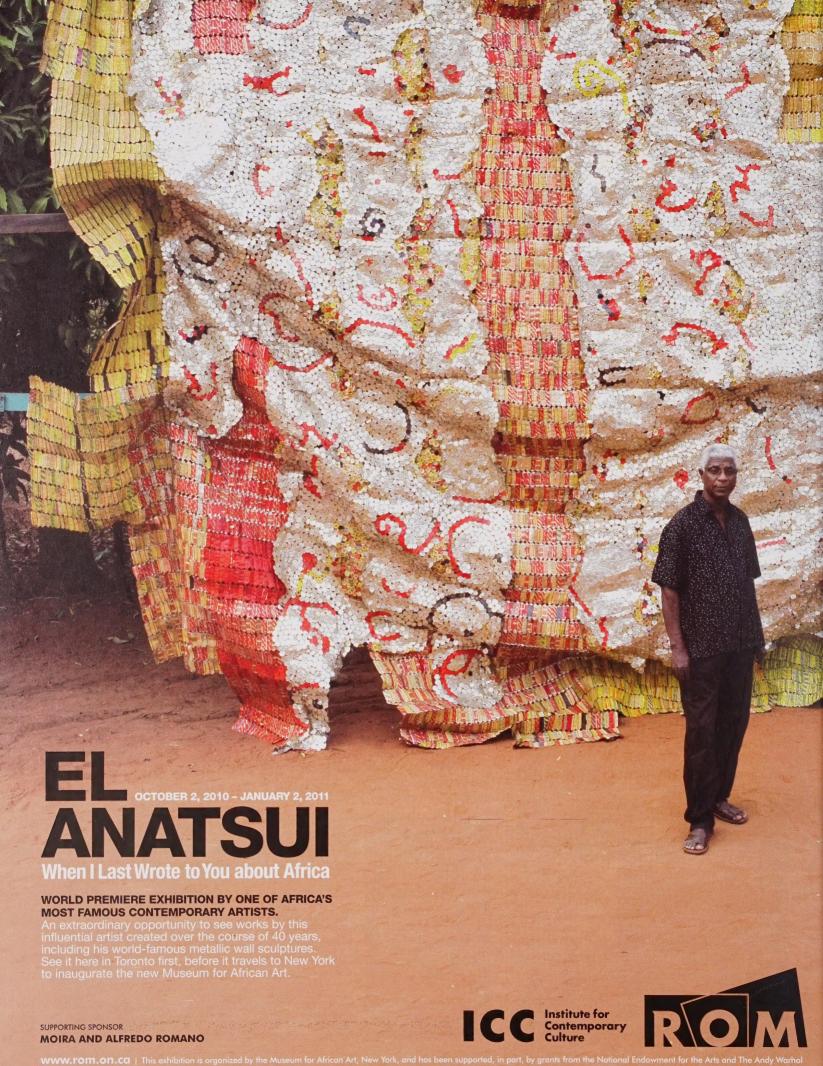
John L. was living like a hermit, isolated and alone in a small apartment. Like many housebound seniors, this 79-year-old Korean War vet-suffering from post-traumatic stress, dementia, and heart disease—had precious few services available after government policies shifted in the mid-'90s. To raise awareness about these vulnerable patients, Dr. Mark Nowaczynski began documenting their world through the lens of a large-format camera. Thirty-six of these poignant images are on display.

### September 25, 2010, to August 2011

Daphne Cockwell Gallery of Canada: First Peoples Hilary and Galen Weston Wing, Level 1

### Jane Ash **Poitras**

One of Canada's preeminent artists, Jane Ash Poitras is best known for her expressive mixedmedia assemblages. Her works explore colonialism and the political and spiritual strength of the indigenous peoples of the Americas.



### Life Everlasting

### Writers and philosophers examine the fear and folly behind this desire

BY MARK KINGWELL

The Sibyl of Cumae, wooed by Apollo, was offered a year of life for every grain of sand she could gather in one hand. More than a thousand, it turned out. But when she rejected his love, the god took sly revenge. The Sibyl aged in a normal span then spent the remainder of her long days shrivelled and suffering, wishing for death. Swift would reprise the point in Gulliver's Travels: eternal life is not eternal youth, still less, eternal happiness. Be careful what you wish for.

Hence a very human paradox: even if we don't want to live forever, most of us would rather not die. Timor mortis conturbat me, as the medieval poets liked to say. The fear of death confounds me.

Socrates is said to have defined philosophy as learning how to die, suggesting not some deranged death cult but an awareness of the fragility, hence the urgency, of life. We want to live well so that when death comes we will feel ready. Klingons staunchly vow that today is a good day to die. Philosophy can help you get there.

Socrates also argued that it was senseless to fear death, since death is the unknown, simple nothingness. It would be as sensible to fear the condition of being not yet born. This is stalwart thinking but bogus wisdom. That nothingness, the absence of experience, is precisely what we do fear. The outrage of death is that individual consciousness simply comes to an end.

Some people believe it doesn't, of course, though this prospect can pose problems for snobs and racists. "There are grave difficulties about the after-life," a nasty Raymond Chandler character muses. "I don't think I should really enjoy a heaven in which I shared lodgings with a Congo pygmy or a Chinese coolie or a Levantine rug peddler or even a Hollywood producer." Meanwhile, for those unconvinced of post mortem resurrection, what to do?

Legacy, rooted in the Latin legatus, means a commission, any act of passing on. In English the connotations are narrower, usually concerned with wills and bequests. Sometimes the bequest is material (money or artworks), sometimes immaterial (privilege or access). Those who have been to elite American schools know that a legacy is the child of a graduate, assured an easier ride through the admissions committee if not actually given a degree in exchange for dollars. The ultimate legacy may be a pervasive sense of social entitlement. George W. Bush, born on third base, goes through life thinking he hit a triple.

Some legacies are mischievous, even evil: think of the tricky bequests in the fiction of Robertson Davies or Henry James, meant to bind enemies in conflict or hinder the freedom of children. A bequest can also backfire, since nobody can completely control how a gift is used or an inheritance is spent. Unlike artworks, but maybe a bit like money, children have minds of their own, which is one reason the ancients from Ovid and Solon to Aristotle warned that we should call no man happy until he is dead.



"I don't want to achieve immortality through my work," Woody Allen once said. "I want to achieve it through not dying." The joke cuts both ways. If eternal life is not what it's cracked up to be, it's likewise true that ideas, friendships, political actions, and loving marriages—the heart- and brain-children, as well as bio-children, that form life's everyday work—are gifts to the future. Your individual consciousness may cease, but you live on in the minds of others whose lives you have touched.

This is the only genuine form of immortality we know. It's enough. o

MARK KINGWELL is a professor of philosophy at the University of Toronto and the author, most recently, of Glenn Gould in Penguin's Extraordinary Canadians series.





Above: Oil spill in the Gulf of Mexico, April 29, 2010.

Left: Waterfowl and shorebirds that winter in the coastal US are at serious risk of starvation and contamination.

### **Curator Views**

### Oil and Water Birds

People around the world have watched with horror the spectacle of live, dying, or dead birds drenched in oil from the devastating blowout at the Deepwater Horizon wellhead in the Gulf of Mexico. Resident coastal species of pelicans, waterfowl, and shorebirds have been hit hard in the middle of their breeding season: their breeding habitats and the marine foods on which they depend have been destroyed, and experts predict that production of young in coming years will be low.

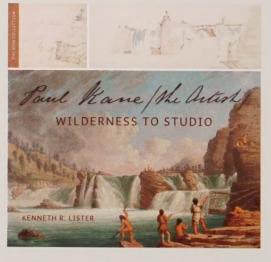
The only bit of good news is that many species of migrant birds that breed in North America passed through the coastal southern US largely unscathed in April and early May before the oil reached shore. But for those birds that breed in Canada as far north as the Arctic tundra during summer, the fall migration could be disastrous as they stop at US refuelling sites en route to Central and South America. Bird species that winter along the coasts of the Gulf states are likely to find little food on the contaminated shorelines. That includes the millions of snow geese that winter on the coasts of Louisiana and Mississippi.

Other vulnerable birds include the endangered red knots and piping plovers that winter in coastal Florida, as well as the green-winged teal, the American widgeon and other dabbling ducks, loons, white-fronted geese, sandpipers, turnstones, and dowitchers. Even before the oil spill, the impact of human activity had created a steady decline in Florida's red knot population, and the prospect of recovery for this small group of about 4,000 birds is now in serious jeopardy.

**ALLAN BAKER** is an ornithologist and head of the ROM's Department of Natural History.

### Book Shelf Paul Kane, the Artist: Wilderness to Studio

Paul Kane's evocative paintings of mid-19th-century Canada have become a treasured part of Canada's heritage. The ROM holds the world's most significant collection of Kane's art: 100 oil paintings and 368 sketches. In 1845 and 1846, Kane travelled from Ontario to what is now British Columbia, sketching the landscapes and native peoples he encountered. His sketches became the basis for the oil paintings he later produced in his studio. Lavishly illustrated in full colour, this sumptuous coffee table volume is destined to be one of the most important books published in Canada this year. Royal Ontario Museum Press, 400 pages, cloth, \$75.



Left: Published September 2010, to commemorate the 200th anniversary of Paul Kane's birth. Printed and bound in Canada.

Right: A translucent wall of panels by students from Bishop Strachan School, based on an aerial map of the building

### From the Archives Mythic Battle

Carving a slice of Greek history

Hungarian-born sculptor and engineer Istvan Botar, seen in this photograph taken by ROM photographer Leigh Warren in October 1961, is carving metopes for the Greek Gallery, which opened the following year. The new gallery was envisioned as a teaching tool devoted to classical Athens, and the space housed reconstructions of daily life and a scale model of the goldand-ivory statue of Athena Parthenos. The metopes, decorative architectural elements typically found above the architrave in Doric buildings, were based on scenes from the British Museum's famed Parthenon marbles, depicting the battle between the Centaurs and the Lapiths, Botar was educated in Budapest and Rome, and emigrated to Canada in 1956 at the time of the Hungarian Revolution. He joined the ROM in 1961 as an artist and sculptor. In the current iteration of the Greek Gallery, one of the metopes is preserved, and can still be seen above the model of the Parthenon. ARTHUR SMITH is head of the ROM's Library

and Archives.





### News

### The Walls & Barriers Project

Giving student artists a voice

"Walls are opaque to the eye but transparent to the imagination." -El Anatsui Last year, when the ROM's ICC announced that it would host the El Anatsui retrospective, ICC board member Elena Soni proposed an initiative that would become the ICC's first major foray into student education—an innovative collaborative art project inspired by Anatsui's words and works, titled Walls & Barriers.

In fall 2009, Soni and York University PhD candidate Vanessa Barnett held a series of workshops for art teachers from across the Toronto District School Board. Their high-school students would explore what walls and barriers meant to them, both physically and conceptually. Students were each given a Plexiglas panel and were encouraged to use locally available materials to decorate it. They could work individually or in groups to complete their pieces by the end of the school year. The panels were then joined to create movable sections of walls—echoing the structure of Anatsui's metal wall hangings.

The project met with unprecedented interest, eventually including 12 secondary schools from the TDSB, 6 private schools, 2 community outreach centres, and the Beausoleil First Nations Reserve—a total of some 500 participants. A popular Facebook page allowed students to exchange ideas, and the entire process was documented on film and video. "The results are astonishing," says Soni. "This project has given students a voice that has not had an outlet in schools before." FRANCISCO ALVAREZ is managing director of the ROM's Institute for Contemporary Culture.

Walls & Barriers will be displayed in Canada Court from September 25 to October 24, 2010. At a special event in late September, El Anatsui himself will meet with the students and offer his reaction, completing the loop of artistic inspiration.

### ROM Burgess Shale Collection Solves 500-million-year-old Mystery

### Joint ROM—U of T research team classifies ancient species

A study by ROM paleontologist Dr. Jean-Bernard Caron and University of Toronto PhD student Martin Smith sheds new light on a previously unclassifiable 500-million-year-old carnivore known as *Nectocaris pteryx*. Based on specimens from the ROM's Burgess Shale collection, *Nectocaris* has now been identified as one of the oldest and most primitive cephalopods, a class of molluscs that includes modern squids, octopuses, and cuttlefish.

The findings, published in the May 27, 2010, issue of *Nature*, suggest that like modern cephalopods, this ancient creature likely used its nozzle-like funnel to accelerate by jet propulsion. What surprised the researchers was the lack of a mineralized shell. "It's long been thought that cephalopods evolved from shelled, snail-like animals," explains Smith. "*Nectocaris* shows us that the first cephalopods actually started swimming without the aid of gas-filled shells, which evolved much later."

The new findings also led the authors to reinterpret fossils from Australia and China as members of the same family. To see a podcast about *Nectocaris pteryx*, go to the ROM's website. Visit the following links to learn more about the ROM's Burgess Shale collection and research: rom.on.ca/collections/curators/caron.php and rom.on.ca/collections/research/jcburgess.php.



Far left: Colour reconstruction of Nectocaris ptervx.

**Left:** Actual fossil of *Nectocaris pteryx*.

### New Acquisitions Deep Insight

### Rare meteorite could aid in understanding how planets form

Of the more than 40,000 meteorites recognized in the world, only 84 are classed as pallasites. An intriguing and enigmatic group, pallasite meteorites are typically composed of the green-brown mineral olivine set in a matrix of iron-nickel alloy—a combination that does not occur on Earth's surface. Recently, the ROM acquired the largest and most important fragment of pallasite ever found in Canada.

The first pieces of this rare space rock were discovered in 1931 near Springwater, Saskatchewan. In 2009 researchers returned to the area and discovered more fragments, the largest weighing 52.8 kilograms (116 pounds). The ROM has acquired this specimen of the Springwater meteorite, by far the reigning record holder in size and now considered the meteorite's new main mass.

Strikingly beautiful in appearance, pallasite meteorites are also of great scientific value. They come from very deep regions of asteroids near the core/mantle boundary, and are considered analogs of the Earth's own core/mantle region. As such, they provide us with invaluable information about areas of our planet that we simply cannot explore. And because they formed at the dawn of our solar system, they are science's best source of information about the history of the solar system itself.

In early July, ROM curators opened the meteorite with a high-precision diamond-wire saw and took samples for study. The large remaining mass has been polished and in future will be on display in the Teck Suite of Galleries: Earth's Treasures.

**IAN NICKLIN** is a technician in the Earth Sciences section of the ROM's Department of Natural History.

Purchased with the assistance of a Movable Cultural Property grant accorded by the Department of Canadian Heritage under the terms of the Cultural Property Export and Import Act.





Above: Up close you can see the striking combination of the green-brown mineral olivine locked in the iron-nickel alloy matrix.

Left: Looking back. A look inside the Springwater pallasite is like peering back more than 4.5 billion years in time.

### Shamelessly setting the automotive standard for the last sixty years.

It isn't surprising that the Mercedes-Benz S-Class continues to be the benchmark that other luxury vehicles are measured against. After all the new S 400 HYBRID continues to lead the way in innovative technologies like its new more fuel-efficient hybrid engine or its new smaller, lighter, more compact lithium-ion battery pack – another Mercedes-Benz first. It also continues to lead the way in performance, styling and making you want it really badly. To test drive the future of the automobile, visit your dealer or mercedes-benz.ca/s today. The S-Class. The icon, refined.





### Packing for the Party

Food and drink in the Afterlife

BY JAMES CHATTO





What will you eat in the afterlife? It depends who you ask.

In my youth, I liked the idea of Valhalla, with its unlimited dinner of pork and endless mead served by lissome Valkyries. Later, I found out that Sæhrímnir (the pig that provides the meat and then comes back to life every day) means "sooty sea-beast" in Old Norse and that Odin's chef, Andhrímnir, boils the flesh rather than roasting or barbecuing it. The mead comes from the udders of an immortal goat. No wonder Odin sticks strictly to wine.

And no wonder that so many of the world's old cultures buried food along with their dead—a packed lunch in case the heavenly commissary wasn't shining with Michelin stars. Inevitably, royalty had the most interesting menu. Five thousand years ago, Egyptian King Aha "The Fighter" was interred at Abydos with dozens of jars of wine and beer, haunches of ox meat, water birds, bread, cheese, and dried figs. More than 40 people were also sacrificed to keep him company.

Emperors in Han dynasty China, sent on their way with hampers of millet, wheat, rice, hemp seed, pulses and pease, and pots of pickled meat, were apparently expected to do some



Out-of-this-World Heavenly Flavours at c5 Passionfruit Margarita with agave nectar, tequila, Cointreau, and a fleur de sel rim (\$12). Cheesecake with 70% Valrhona chocolate paired with Toronto's Own Cheese Boutique artisanal cream cheese (\$12).

cooking. The Celtic Hochdorf Prince, who died around 550 BCE, was clearly more of a party animal. He was buried with a cauldron containing 350 litres of mead and nine drinking horns in case he ran into old friends.

Mead again . . . The more one looks into it, the more it seems that humankind envisions eternity as a very long booze-up. Wishful thinking, I suppose. And it might be one reason why a funeral is so often seen as an opportunity for drinking. It isn't only the Irish who throw a wake. I remember when my old friend Kostantes died in the remote Greek village where we used to live. He was a builder, a charming rogue, and we had stayed in his house while he helped my wife and me renovate ours. I had neglected him shamefully after that, but his widow invited us to the visitation to sit beside his body for a while and remember old times. As is the tradition in rural Greece, she poured us brandy and offered cigarettes-a most appropriate ritual in this case, as drinking and smoking had been prominent among Kostantes's personal enthusiasms. The day after the church service, his male friends gathered in the bar he favoured to drink to his memory.

In modern times, funeral rites of food and drink are less about providing post-mortem sustenance for the dead and more about the bonding of the bereaved. Maybe they always were. In Valhalla, though the glorious dead spent their days fighting and re-killing each other, they all came together every night for a rowdy bash. The pork might not have been the finest and the mead may have tasted a trifle goaty but the feeling of companionship was intense. Religious beliefs can divide humanity, fostering terror and war; food and drink unite us, in this world and the next. o

**JAMES CHATTO** is a Toronto-based food writer and editor of *harry* magazine.

### How to ID a Space Rock

Clue: It's about the bubbles

BY IAN NICKLIN

I found a blackened rock that I think might be a meteorite. How can I tell for sure? - N. K. Toronto, Ontario

It is widely held that a picture is worth a thousand words. In the case of meteorites or more often meteor-wrongs-the all-too-terrestrial objects that are mistaken for meteorites—this is particularly true. Every year the ROM's Earth Sciences section receives dozens of e-mails, letters, and phone calls from people like yourself who have found an unusual rock that they suspect is a meteorite. It's easy to understand why. Written descriptions of meteorites usually specify a blackened, charred, or "burnt" exterior with surface pitting, sometimes referred to as thumbprinting. Less

often "heavy" and "magnetic" are also included as criteria. The problem is that these "diagnostic" features are commonly mimicked by industrial by-products, such as slag. Slag does have a quite striking, other-worldly appearance and is often found in unlikely places—which naturally leads people to suspect that it has fallen from the sky. But given Toronto's industrial past, and the number of landfills in which slag was a common component, it's not all that surprising that slag turns up in seemingly impossible places. To this day it is still regularly found in railroad beds.

Like true meteorites, slag does have a melted or burnt appearance because it was at one time molten. But unlike meteorites, which are charred from enduring the passage through our

atmosphere, slag is charred in a blast furnace, and its surface can be even more tortured than that of most meteorites. Like meteorites, slag is often heavy and sometimes quite magnetic, since smelting is typically not 100 percent efficient. and iron may remain within it.

So how do we tell the difference? The telltale characteristic is bubbles. Gas bubbles are rare in true meteorites but nearly ubiquitous in slag. Another difference is that slag is a glassy material that shatters with the characteristic scalloped or "chonchoidal" fracture of glass while real stony meteorites break more like terrestrial rocks.

The ROM owes a debt to readers like yourself who are out paying attention to your surroundings and noticing odd, out-of-place objects. This is how discoveries are made. But it often takes a practiced eye to pick out the differences between true meteorites and Earth rocks that mimic their appearance. Fortunately, the ROM offers a large display of "meteor-rights" in the Teck Suite of Galleries: Earth's Treasures, where visitors can see many examples of the real thing. o

IAN NICKLIN is a technician in the Earth Sciences section of the ROM's Department of Natural History.







### The Silk Weavers of Exurban Antananarivo

Documenting a dynamic tradition

BY SARAH FEE

**Popular perceptions of spices and rainforests aside,** Madagascar's capital Antananarivo is a bustling city of some 2 million people. Serving as the seat of the Merina royal kingdom until 1897, the city and its wealthy residents once supported a legion of artisans. To this day, though it's little known even to local residents, this district of shopping malls still supports the largest remaining communities of Malagasy handweavers to the north and east of the city.

In February 2010, I travelled there to document the traditions of Chinese or bombyx silk handweaving. In particular, I was in pursuit of a patterned silk cloth called akotifahana made with multi-coloured weft designs. Though this cloth has been actively collected by Western museums, including the ROM, little is known about its early origins or who it is made by today. My search took me first to a region just east of the city, the historic home of two noble clans who traditionally wove this cloth.

Accompanying me in her family's 1985 Peugeot sedan was Dr. Bako Rasoarifetra of the local Institut de Civilisation. Driven by the inevitable nephew, we rattled over earth roads that meander off Antananarivo's fancy new paved circular street and through the shimmering emerald of ripening rice fields, over log bridges, and up barely negotiable hills where recent rains had deepened the roads' gouged ruts.

Migration to the city with its increased education and new job opportunities has taken its toll on this once-famed artisan region, some of whose villages are now traffic-snarled suburbs, and we were able to locate only three active weavers, all in their 70s. One of them graciously allowed us to document her family's story on video. The gathering of her seven children, who had learned to weave but abandoned the craft these past 20 years, proved a joyful reunion around the loom.

The second part of my mission was to learn for myself how to weave silk and I apprenticed myself to a pair of weavers 30 minutes north of the capital, the new heartland of akotifahana production. In these rural villages filled with two-storey red earth dwellings, hundreds of weavers carry on the silk-weaving tradition. Their main products are shawls and burial wraps, which play a significant role in Malagasy culture.

I travelled there in a "bush taxi," a small bus overflowing with country dwellers and their produce, with wooden planks placed across the aisles to squeeze in more passengers. Under the tutelage of two sisters, I learned and filmed the steps for silk akotifahana clothmaking—degumming, winding skeins, warping, weaving, and decorating. The result was a woman's white shoulder wrap, now in the ROM's collection.

Contributing significantly to my long-term study of Malagasy handweaving, this five-week trip was the first in a series of projects with the Institut de Civilisation to preserve not just objects, but artisanal knowledge, some of which, as we found, has already been irretrievably lost.  $\circ$ 

SARAH FEE is associate curator of Textiles in the ROM's Department of World Cultures.



Far left: Winding silk into skeins in the village of Ambohidrabiby, March 2010.

Left: Detail of 19th-century akotifahana cloth.

## Chaja Moin-ud-din Saheb, ROM 2007.17.18.6. Commander-in-Chief, ROM 2007.17.18.36.

### Looking Through the Lens of Deen Dayal

A ROM curator digs deep to detail the works of a famed photographer

BY LEE-ANNE JACK



**Dr. Deepali Dewan**CURATOR
Department of World Cultures

### Academic Positions

2002-present Curator

Royal Ontario Museum

Assistant Professor

Department of Fine Art History,

University of Toronto 1999-2000

Visiting Instructor

Carleton College, Northfield, MN

1995-1997

Curatorial Assistant

Walker Art Center, Minneapolis, MN

1994

Curatorial Intern

The Asia Society Galleries, New York, NY

Education

2001 PhD in Art History, University of Minnesota 1995 MA, University of Minnesota 1993 BA (honours), McGill University In a dusty back room piled with old filing cabinets, ROM South Asian curator Deepali Dewan discovered the Rosetta stone of her research on 19th-century Indian photographer Raja Deen Dayal. Though he's India's best-known photographer, Deen Dayal's works have never before been explored in a major publication.

Dewan was seeking the registers, said to reside in an archive in India, that identified all the photos taken by Dayal's studio. The problem was that the archive had been inaccessible to scholars for more than a decade for various reasons, the most dramatic of which was that a cow had died there and the smell was still dissipating. But Dewan, who joined the ROM in 2002, persisted. After six years of sleuthing on three continents, she found not only the original registers, but the only surviving microfilm copy made by one of Dayal's descendants. Back at the ROM, Dewan digitized it and made sure that this valuable record equalling more than 1,000 hand-written pages would never again be lost to history.

"Archival research is often very much like archaeology," says the New Delhi-born US-raised curator. "You uncover things that change your whole view of history." Deen Dayal produced more than 40,000 images in his lifetime, but to Dewan's surprise, he did not take all the studio's photographs. "After a certain date he had many staff photographers." Another surprise was Dayal's mastery of public relations: as well as the elite residents of Bombay, his patrons ranged from the British colonial administration to the wealthy Nizam of Hyderabad.

The ROM holds some 500 Dayal photographs, whose subjects Dewan is identifying as part of her work on South Asian visual arts—a great job



Left: Projection of the control of t

for someone who grew up as a keen reader of 19th-century art books.

"One of the things that excites me about this research is discovering how photography shapes our understanding of the past and present," says Dewan. "Sitting here in 2010, we can't even imagine a world without the photographic image. Photographs are the water in our fishbowl, so much a part of how we live that we don't even notice them any more."

With her next project, tracing the history of Indian photography, Dewan will continue to mine for that understanding by digging through more archives, recording oral histories, and talking to photographers. "In Toronto there's a large South Asian diaspora community, many of whom were part of making photographic history back home," she says. This precious resource right on Dewan's doorstep will undoubtedly help her to uncover more of India's hidden visual history. o

Deen Dayal: Vision, Modernity, and Photographic Culture in 19th-century India by Deepali Dewan and Deborah Hutton will be released in 2011.

### Say Cheese

Using a recovered microfilm, ROM researcher Deepali Dewan was able to match one of Raja Deen Dayal's images to a newspaper description—the first photograph ever taken by flash in the kingdom of Hyderabad. It was taken at a theatre performance. When the audience saw the flash and then a puff of smoke, they were sympathetic at what they thought was the photographer's dismal failure. But to everyone's astonishment, the newspaper reported that Deen Dayal had produced a beautiful image.



### Left:

the Court of the C

**Robert Mason** Near Eastern and

| Although Middle Eastern ceramics continue to be the focus of Robert Mason's research, the vagaries of archaeological fieldwork have involved him increasingly with prehistory. In 2009 during fieldwork near the monastery of St. Moses, north of Damascus in the Syrian Desert, he discovered what appear to be ancient corbelled tombs, with associated stone circles. Scattered in the same desert area were stone tools that may date to the Neolithic, or possibly to the Early Bronze Age (before 3500 BCE). The find may offer new insights into death customs that emerged after the early Neolithic, when practices included exhuming and plastering skulls of the deceased as shown below, from Jericho.



### VIETNAM



Claire Healy ASSOCIATE CURATOR Invertebrate Zoology

In March, Claire Healy visited Vietnam to survey tapeworms and other parasites of rays and sharks from the Gulf of Tonkin and the South China Sea. With colleagues from the US and the Vietnamese Academy of Science and Technology, she examined 26 species of sharks and rays. Tapeworm species collected in Vietnam will be compared to those gathered previously in Australia and Borneo. This study is part of a global initiative to improve our knowledge of the diversity and evolutionary relationships of the tapeworm parasites of all vertebrate animals. For further details, see tapeworms.uconn.edu

### SOUTHEAST ASIA CHINA



**Judith Eger** SENIOR CURATOR Mammalogy

A 40-year veteran of the ROM, Judith Eger has research interests in the systematics and biogeography of bats of Asia and Madagascar as well as mammals of the Canadian North. Her current research concentrates on tube-nosed bats of Southeast Asia, using morphology and DNA sequencing. Fieldwork has taken her on eight expeditions to Vietnam and China, where, along with colleagues from the ROM and the USA, she has participated in studies of biodiversity of northern Vietnam and southwest China. On several occasions she has returned with a new species of bat. In April. she participated in a short workshop in Belize on bat biology.



Ka Bo Tsang ASSISTANT CURATOR Far Eastern

In June 2009 Ka Bo Tsang travelled to Shanxi province, China, to investigate the former site of Xinghua Monastery, original home of the ROM's world-renowned Yuan-dynasty (1279-1368) Buddhist mural The Maitreya Paradise. While in Shanxi, she also visited Yongle Gong, an important Daoist sanctuary with murals similar in subject and style to the ROM's pair of Daoist murals, Homage to the Highest Power. This fall Tsang travels to Shanxi and Sichuan provinces to study sculptures of deities in Buddhist and Daoist grottoes She will use the collected data to re-evaluate the cultural significance of the ROM's iconic Chinese treasures.

### AUSTRALIA, EW ZEALAND



**Oliver Haddrath TECHNICIAN** Ornithology

Oliver Haddrath has focused his recent research on the large flightless birds of the southern continents. He uses DNA sequences of slowevolving genes and identifies rare genomic events to determine how these birds are related. Fieldwork has allowed him to collect bones from recently extinct members of the group—the giant moa of New Zealand and the elephant bird of Madagascar—as well as the living membersostrich, emu, rhea, kiwi, and cassowary. His DNA research is addressing the questions of how these birds spread across the southern hemisphere and how that dispersal was shaped by the breakup of the supercontinent Gondwana 80 million years ago.







### Where in the world are they?

The who, what, and where from our international curatorial team



### The Sweet Hereafter

Four experts share a glimpse into human perceptions of the afterlife across cultures and time

> here do we go when we die? It's a question people have pondered likely since the earliest days of humanity. Across time and geography different peoples have developed beliefs in an existence after life: an actual afterlife. Many share the idea that after our bodies die, an essential component of our beingour soul, consciousness, or however we may imagine it—is judged and ends up in an eternal existence.

Some of these afterlives sound quite grim. The gloomy realm of Hades conceived of by the ancient Greeks featured five rivers symbolizing sorrow, lamentation, fire, oblivion, and hate. On the other hand, the paradise imagined in the Islamic world was filled with houri, lovely-eyed companions-much more inviting.

Afterlife beliefs are expressed in various ways, but most obviously in burial practices. Often an expression of ourselves, funeral rituals reflect our wealth, our prestige. The service and the tomb or other "home" for the deceased is entirely a statement about the living.

But many cultures consider the deceased as beings of power. To them, tombs provide an interface between realms, a place to pray and give offerings intended either to procure the aid of those on the other side, or propitiate their hostility.

When the deceased were persons of power in life, the desire for continued might in the afterlife may influence the preparations they make for death. China's First Emperor, for instance, approached his preparations for the afterlife with the same military skill he used to conquer neighbouring states to create a unified China. He prepared a vast army of earthenware warriors, each individual, arraying them in tactical dispositions. His intelligence on the terrain of the afterlife may not have been quite what it could be, but we may assume that he gathered whatever information he could with whatever resources he controlled. And with his Terracotta Army in place, the First Emperor made his attempt to conquer the afterlife with all the authority he wielded in life. For all we know, he succeeded.

This fall, a small part of the First Emporer's Terracotta Army remains on display at the ROM, and is accompanied by a major three-day symposium (October 14 to 16). During Day 2, nine speakers will share their knowledge about perceptions of the afterlife. Here, four of those experts offer a preview.

ROBERT MASON, an archaeologist at the University of Toronto and the ROM, is the academic organizer of the afterlife symposium.

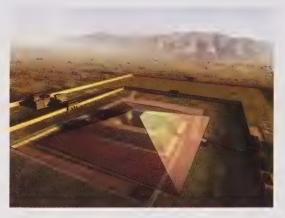
Opposite: A tomb in Androy southern Madagascar, mixes the old and new styles. 1993.

### **Ancient China**

In ancient China, the idea of an afterlife was conceptualized by Confucius (or Kong Zi, 551–479 BCE). In one of the Five Classics based on the teaching and annotations of Confucius and his students, the Book of Rites, edited in the 1st to 2nd century BCE, one verse states, "Serve the dead as you would have served them in life—that is the rite." It became a motto for all time, and ancients believed that they would live in the afterlife in much the same way as in this life.

Archaeologists have found 9,000-year-old Neolithic Chinese graves that contain human bodies buried with domesticated dogs, these "best friends" sacrificed to accompany their masters in the afterlife. Later, pigs (or pig jaws) were found in graves, symbolizing the wealth of the deceased. Neolithic elite were buried with a large number of ritual jades, probably to display their social status in the afterlife. The tradition continued into China's Bronze Age when ritual bronzes were placed in noble tombs.

Human sacrifice, too, was a traditional burial ritual dating from the emergence of stratified society in China about 6,000 years ago. In the 5th century BCE, the Duke of Qin was buried with 177 humans sacrificed to serve him in the afterlife. The next Duke banned the practice, and began using terracotta figurines as substitutes. The first terracotta warriors emerged in the 3rd century BCE in miniature size. China's First Emperor, though,



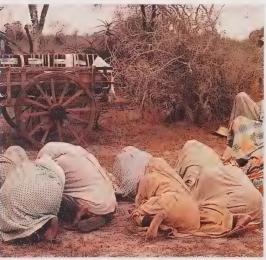
Left: This reconstructed image of the First Emperor's massive tomb complex shows a view of the imagined inside of the unexcavated tomb mount.

was a revolutionary in death as in life, creating his Terracotta Army at life size and building the largest tomb complex in history. Rather than simply following the tradition of having many precious objects buried with him, he aimed at nothing less than the re-creation of his entire world in the hereafter.

**CHEN SHEN** is a ROM senior curator, Bishop White Chair of East Asian Art & Archaeology, and the lead curator for the exhibition *The Warrior Emperor and China's Terracotta Army*.

### Madagascar

In rural Madagascar, properly burying parents and being properly buried oneself are the major goals of life. In this large island nation off the coast of East Africa, ancestors are believed to bless descendants with prosperity when pleased or punish them with chronic misfortune when angered. Accordingly, they inspire many of the island's greatest arts and rituals.



Left: Women wail before a coffin wrapped in cloth, Androy, 1995



Left: Sons remove the horns of a sacrificed ox to place on their father's tomb in the village of Ambondro, Androy, 1994

Most Malagasy spend their lives in small, one-room dwellings of mud or thatch. But their tombs are a striking contrast. In the central highlands, square stone mausoleums dominate hilltops, while in the west and south, royal graves are made of hardwood, the walls ornamented with tall wooden sculptures depicting birds or humans.

In the 19th century, new tools, materials, motifs, and techniques such as masonry became available at the same time as local kingdoms were collapsing under French colonization. Commoners, seeking to honour their ancestors with the finest and most modern décor, appropriated royal decorative prerogatives with a resulting burst of artistic experimentation and new vogues. The Tandroy people of the south began constructing gaily painted cement tombs up to 30 square metres in area along roadsides, a change from burying their dead in secluded sacred forests.

Cloth is an essential Malagasy funerary item. Most weavers' finest works are made for dressing beloved kin upon their deaths. The dress of the deceased may take a form similar to styles for the living but the cloth is carefully worked with fancier motifs or beadwork. Funerary cloths may number 20 or more for each person, and their value can rival the cost of the tomb.

Numerous other costly rituals are also required for passing to the afterlife: oxen must be sacrificed and feasts must be prepared for the hundreds of kin who gather over two days to bid farewell to the departed in grand style. This means that from an early age, people must begin amassing the necessary wealth and goods, perhaps even foregoing medical care and fine dress in this life to ensure reunification with their loved ones in the next. Among the Betsileo and Merina peoples of the highlands, descendants' duties do not end with burial. Ancestors may appear in dreams demanding to be wrapped in new cloth, or moved to a new tomb, sparking a new round of ritual and keeping artisans, ancestors, and descendants in an ongoing cycle of creation and blessings.

**SARAH FEE** is associate curator of Textiles in the ROM's Department of World Cultures.

### Egypt

Egyptian mummies and grave goods seen in museums around the world imply that the ancient Egyptians were obsessed with the afterlife. Tomb walls and papyri show detailed and colourful images of life as imagined on the other side. Some depict the deceased fishing or simply drinking cool water; others are filled with monsters and fiery pits. Faced with death, as we all are, were the Egyptians confident of a new life, or were they afraid and doubtful of survival?

Ancient Egyptian society viewed death as an enemy. Death rendered the living silent and still, cut off from communication with family and friends, incapable of enjoying the pleasures of daily life. Egypt's funerary cult, developed in an attempt to ensure that the dead would not be lost to the community, focused on continuation and reciprocity. Identity and social position might be preserved if the name and titles of the dead were remembered and recorded. And while the physical signs of death could not be reversed, bodily decay could be minimized through mummifica-



Tety's coffin. The god Anubis, in the reassuring form of a dog. completes the that will ensure the next life. The goddesses Isis and Nephthys kneel on either side, keeping vigil tion. The thin, dried human remains were housed in tombs, where they could be offered food and visited by the living. In return, the spirits of the dead would assist them when needed. Rather than the end of human life and identity, death might be simply a transition to a new life.

In the tomb of Paheri, the Mayor of El Kab in Upper Egypt, the relationship between the living and the dead found beautiful expression in this poem, recorded in the book The Tomb of Paheri at El Kab (poem translated by G. Gibson):

I have what I need in all things. I shall not fail to respond. While I was living in the world, No sin against god was laid at my door. I have become a blessed spirit, I have furnished my place in the cemetery, The dead is a father to the one who acts for him, He does not forget the one who pours water for him.

From the spectacular pyramids at Giza to simple pits dug into the sand, the tombs of the ancient Egyptians reflected and maintained a person's status. Interring goods with the dead and decorating tomb walls with images of daily and ideal life, the ancient Egyptians ensured that the memory of the deceased would endure. That to speak the name of the dead, was to make them live again. So far, their imagined afterlife, still vibrantly alive in popular knowledge around the world, has held out these almost 5,000 years against oblivion.

GAYLE GIBSON is an Egyptologist who teaches at the ROM.

### Ghana

In the coastal towns surrounding the metropolitan centre of Accra in Ghana today, most of the Ga people have converted to Christianity or Islam. Yet many still practice the rituals and ceremonies passed down by their ancestors who believed in a creator god ataa naa nyongm, a hierarchy of minor gods, and tutelary spirits summoned by priests or priestesses to serve as intermediaries between living people and the gods.

Even more than the gods, ancestors are considered powerful spirits able to influence the lives of their descendants. Because of this power, ancestors receive the prayers and sacrifices of the living and are worshipped daily by their descendants. But for the Ga, not every man or woman can become a spiritual ancestor. Achieving this status is critically dependent on the successes of a person's lifetime. Only those who have died at old age with a great number of descendants and have died a "good" death may be welcomed into the spiritual world. Those who die a "bad" death in a car accident, in childbirth, while away from home, for example—are thought to become vengeful spirits. Ga beliefs find their most spectacular expression in funeral ceremonies. Nowadays, funerals last only three days, but in the past they could continue for more than a week. The deceased are treated with as much opulence as their families can afford. The body is laid on a bed decorated with fancy imported fabric, satin, flowers, and gilded ornaments. Relatives and friends come to pay their respects and convey their messages for the other world.



Left: Ga funeral July 2009.

After the funeral, the body is placed in a coffin and paraded around town for a final farewell. Since the late 1950s coffins have become fantastical sculptural works that celebrate the achievements of the deceased. Expensive cars, fish, cocoa pods, airplanes, canoes, fancy shoes, tools of a trade, or objects that symbolize traditional prestige are just a few of the coffin shapes that bereaved families can order. Among the Ga, the final journey to the world of the ancestors must be made in style! o

SILVIA FORNI is associate curator in the Anthropology section of the ROM's Department of World Cultures.

### REFLECTING ON AFRICA

There's more to artist El Anatsui's sensuous metal wall hangings than the transformation of common materials into objects of beauty

BY FRANCISCO ALVAREZ

In October, the ROM's Institute for Contemporary Culture presents the debut of a retrospective exhibition of works by celebrated Ghanaian artist El Anatsui. In an interview with ICC managing director Francisco Alvarez, Silvia Forni, ROM curator for El Anatsui: When I Last Wrote to You About Africa, talks about the man behind these inventively captivating works.

**Francisco Alvarez:** Why has El Anatsui become such an important international contemporary artist in the last decade?

Silvia Forni: Anatsui's success is the culmination of a long journey. He has not always been in the spotlight, but his personal and creative itinerary has always been international. He was born in Ghana, has lived in Nigeria for more than 30 years, and has travelled extensively. Throughout his career, Anatsui has explored ways to transform common materials into objects of beauty. While achieving this goal in many of his earlier artworks, the bottle cap tapestries—which he has produced since 2002 appeal to quite diverse audiences. Robert Storr, curator of the 2007 Venice Biennale, where Anatsui's work was prominently featured. defines his recent pieces as "scintillating fields of wonder." These are rich works from both the conceptual and the visual perspectives. They are novel, abstract, yet very accessible and thought provoking.

**FA:** Apart from the obvious beauty of his work, what personal, cultural, or political themes are expressed?

Above, right: Assorted Seeds II, 1989. Wood. El Anatsui.

Left: Factory print with adinkra motif from the ROM's collection.





**SF:** Like any artist, El Anatsui draws inspiration from the cultural environment in which he lives. Though he is well travelled, he has chosen to live in the relatively small town of Nsukka in eastern Nigeria. His work speaks about Africa in a rich and layered manner. He explores the materials available around him, the graphic knowledge of his own place of origin, and of the cultures that he has come to know while living in Nigeria. Many aspects of his work can be seen as a reflection on history, on cultural contact, on colonialism, and on the different forces, ideas, and aesthetics that shape contemporary life in Africa.

**FA:** How are his large, sensuous metal wall hangings designed and assembled?

SF: It is a long and laborious process. Anatsui sources his materials from local liquor companies, where he purchases the metal caps and sleeves from returned empty bottles—the same material used by those who make the aluminum pots sold in every African market. He employs several studio assistants, who flatten the caps and produce strips or panels in specified textures and colours by connecting the wafer-thin rectangles and circles with copper wire. When enough strips have been produced, Anatsui works on the composition, laying the various elements on the studio floor. The composition, like that of a poem or a piece of music, can take several days.

**FA:** How does Anatsui's work tie in with the ROM's African collection?

SF: Anatsui's work introduces a new dimension to the understanding of African creativity. It resists any possible primitivistic reading. While Anatsui's work reflects aspects of Ghanaian or Nigerian art forms that are represented in the ROM's collection-such as Kente cloth and adinkra graphic symbols from Ghana, or nsibidi writing from Nigeria-his work cannot be classified in the ways that Western institutions have typically approached African art. I consider Anatsui's work to be important precisely because it does not tie in, but comes as a surprise and pushes us to reflect on the narrowness of our categories. Thanks to Anatsui the ROM will be a bit more African and contemporary, both in the programs that will be offered and in new acquisitions.

**FA:** Over the last few years, I've been impressed by Anatsui's works, which I've seen in the important *Africa Remix* exhibition at the Pompidou Centre, Paris, at the Venice Biennale, and other shows. It's quite a coup for the ICC to be presenting the world premiere of this prestigious exhibition.

SF: It is quite a coup. Originally, the ICC tried to book a travelling exhibition organized by the Smithsonian Institution, but the tour was over. This led us to the Museum for African Art in New York, which was planning a larger Anatsui retrospective to open their new building in 2010. When construction fell behind schedule, delaying the show's opening by a year, they offered the world premiere to the ICC. This is the artist's first solo exhibition in Canada, and it provides a unique opportunity to reflect on Africa, on the art and creativity that originate from this vast and very diverse continent, and on the importance of this ever-changing heritage for the people of African descent living

in North America. o





El Anatsui: When I Last Wrote to You About Africa is presented by the Institute for Contemporary Culture from October 2, 2010, to January 2, 2011, as part of the ROM's Season of Africa. A slate of programs on African contemporary art, human rights, music, and dance will be presented. On November 8, the Eva Holtby lecturer is Dr. Henry Louis Gates, Jr. For details, see Let's ROM or go to rom.on.ca. The exhibition is organized by the Museum for African Art. New York, and has been supported.

The exhibition is organized by the Museum for African Art, New York, and has been supported, in part, by grants from the National Endowment for the Arts and The Andy Warhol Foundation for the Visual Arts.

Above: Zebra Crossing III, 2007. Aluminum and copper wire. El Anatsui.



## BUILT for SPEED

With the aid of face-to-beak observation, a visiting ROM researcher uncovers the secrets of an exceedingly efficient marathon runner

Opposite: A feral ostrich racing through the African steppe. Although flightless, this bird is actually "airborne" for 70 percent of the time it's running at high speed.



uge eyes, elegant strides, a flurry of fluffy wings. The largest bird on earth stands imperiously before me and, without warning, her beak dives to my level from a height of 3 metres, stealing the cap off my head. The thief runs for the hills. I give chase, but quickly embrace its futility; within seconds, I'm left in the dust.

We humans are quite good on our feet—top marathon runners cover 42 km in just over two hours. But we don't come close to matching the performance of the ostrich. At a steady 60 km per hour, this 150-kg giant can cover the same distance in one-third the time, and with top speeds exceeding 70 km per hour, it can actually run faster than some of its avian relatives can fly.

These big birds are not just fast. Bernhard Grzimek, director of the 1959 award-winning documentary *Serengeti Shall Not Die*, points out that no other animal runs with the endurance of the ostrich. Its unparalleled combination of speed and stamina allows this bird to cover great distances to find fresh grazing pasture or quickly outdistance hungry hyenas.

It was in 2002, during a volunteer stint at the Frankfurt Zoo, that I became fascinated by the ostrich's ability to leave everyone behind. I wanted to find out how they did it. Relative to size, ostriches require only two-thirds of the predicted amount of metabolic energy to run a given distance. This suggests that unknown mechanisms are in play.

A few existing studies described some of the ostrich's locomotor components—there were anatomical descriptions and some lab studies of ostriches running on treadmills (no, they weren't spotted at the local gym!—the birds ran on machines specially designed for their size and weight). But nobody had explored both form and function. My study would examine skeletal and muscular structures and employ modern biomechanics to discover what makes this bird a marathon superstar. My third methodology, though, was the most exciting. To observe live ostriches closely, in a way that ensured reliable data gathering, my best solution was hand-raising the ostriches myself (see "Fowl Play," page 29).

### SPEED

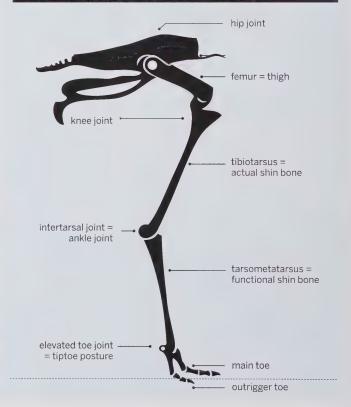
First I looked at speed. I used the ROM's skeleton collection to compare the length of the ostrich's leg to those of other ground-dwelling bird species, including the chicken-sized roadrunner and the 50-kg emu. Not surprisingly, ostrich leg architecture is "top-ofits-class" in both requirements for reaching high velocities—long step length and high frequency of steps. Ostriches have the longest legs comparatively, capable of achieving incredible 5-metre stride lengths when running. And their muscle mass is concentrated high on the thigh bone and hip compared to the other species, making the swinging portion of the leg, below the knee, comparatively the lightest, giving the ostrich a high step frequency.

Right: In terms of speed, the two-toed ostrich (far right) beats the three-toed emu hands down The emu walks while the ostrich tiptoes with an elevated "heel. This creates an additional leg ioint, decreases surface friction. and increases leg length to achieve optimum speed



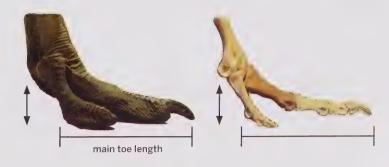


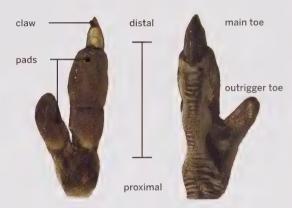
### Ostrich Leg: Component Parts



Unlike actively powered muscles, ligaments can limit joint motion passively in much the same way that a corset does. I filmed my ostriches from various angles, and measured the range of motion in the live birds. I then measured how far I could move a dissected ostrich limb that had the muscles and tendons removed. The range in the live and dissected limbs was nearly identical, proving that ligaments are the main elements that guide an ostrich's leg through its stride. This frees up muscle power to be devoted to forward propulsion.

While I was manipulating the dissected limbs, I noticed something else that hadn't been recorded before. I had to overcome some resistance when trying to flex the ankle joint—an unexpected finding in a lifeless limb devoid of muscles. When I released the joint, it automatically snapped back to an extended position. Here again, it seemed that ligaments could be keeping the bird's leg extended passively. To test this theory I exerted pressure on the leg until the ankle joint collapsed into a flexed position. It required 14 kg of downward force—28 kg of weight that an ostrich standing on two legs would not have to support actively, again freeing up energy for forward motion.



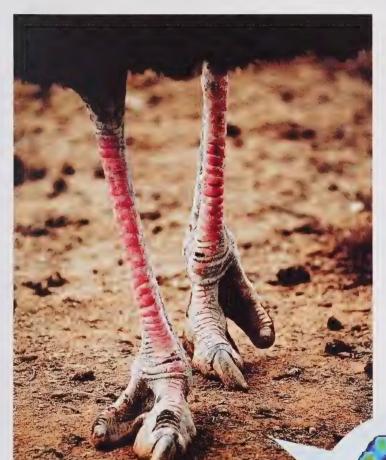


The right "foot" of an ostrich (black arrows indicate elevated toe joint).

Above, left: Average standing position with "outrigger" toe abducted.

Above, right: Toe skeleton.

Left: Top and bottom views.



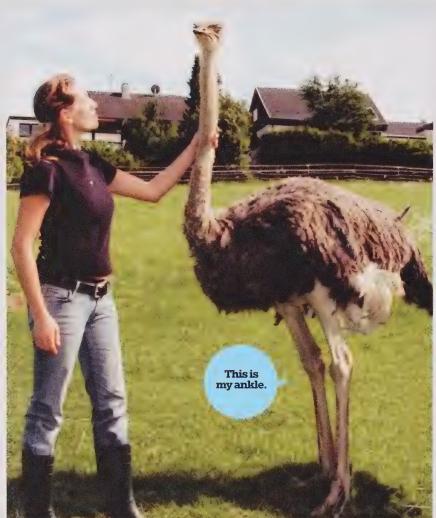
Left: An ostrich walking overground with the right "foot" forward. The inset depicts the corresponding load-distribution profile recorded with a pressure plate. Red indicates areas of very high load; dark blue indicates minor load.

### WHERE THE RUBBER MEETS THE ROAD

Decreased friction on the ground is another way of increasing energy efficiency. This is why the wheels of a *Tour-de-France* bicycle are considerably narrower than those of Granny's old clunker and why properly inflated car tires improve gas mileage. Toe positioning is the main strategy animals use to decrease surface friction. Over the course of evolution, the previously five-toed horse, for example, now gallops only on the toenail of its middle finger—or hoof.

A similar evolution is seen in the ostrich. Its ratite relatives (other large flightless birds), including the Australian emu and South American rhea, possess three toes while all other bird species have four. The ostrich is the world's only two-toed bird. It is also the only bird to walk on tip toe.

The combined reduction in surface contact of having only two toes and using a tiptoe posture is impressive: compared to emus and rheas, the ostrich's plantar surface—the part of the foot touching the ground—is 60 percent smaller relative to size. So the ostrich loses very little energy through friction.



### **Comparative Anatomy**

While humans are plantigrade—meaning that we place our entire foot on the ground when we walk or run—birds are digitigrade—they use only their toes. In birds, the bone between ankles and toes is much longer than in humans, and serves an equivalent function to our shin bone. The bird's ankle joint is up at knee level, which explains why a bird seems to flex its "knee" backwards. A bird's actual knee joint, hidden under plumage, is permanently flexed and connects to the hip joint via a short, horizontal thigh bone.





wondered if examining exactly how ostrich toes interact with the ground could tell me more. This had never been studied in live birds and there was no established method of investigation. I came up with the idea of using a pressure plate, a device commonly used by orthopedists to analyze pressure distribution in human feet. Fortunately, I was able to persuade my ostriches to walk over the plate, which provided high-resolution real-time recording of how pressure transitioned over the ostrich "foot" as it walked. I found that, like shock absorbers, the soft soles of the toe evenly absorb high stresses. This increases the ostrich's grip on the ground and protects the toe bones. I also discovered that the big toe supports most of the ostrich's body mass, while the smaller toe acts as an outrigger, compensating for loss of balance. While walking, the claw of the big toe barely contacts the ground, but it exerts pressures up to 40 kg/cm<sup>2</sup> (about the force of a full bottle of champagne falling on your toe) when the bird runs. The claw digs into the ground like a hammered spike to ensure reliable grip at 70 km per hour-maximum speed with minimal energy, ideal for endurance running on level ground of the African savannah.

### **Ostrich Facts**

### Watchtower of the Steppe

With a height of 3 metres and excellent eyesight, ostriches are the early-warning system of the African savannah. Grazers, such as zebras and gazelles, have learned to keep an eye on nearby ostriches. If one starts running, it's often best to follow suit.

### Eyes on the Prize

At 5 cm in diameter, the ostrich's eye is not only bigger than its brain but is the largest of the terrestrial vertebrates—larger even than that of the elephant, which can weigh close to 7.5 tonnes.

### Finding Ms. Right

To bump up their sex appeal during mating season, male ostriches blush a bright red on beaks, necks, and legs. They also engage in "feats of strength" during vigorous kickboxing tournaments. Admiring hens demur to courtship by the victors.

### **Lords of the Dance**

As part of their courtship ritual, males perform an impressive flamenco with wild wing fluttering, neck snaking, and a penetrating song of subsonic "booms."

### Revenge of the Top Hen

In addition to having a primary hen, a male ostrich takes two or more secondary mates, and all females lay eggs among several nests—a strategy that increases genetic diversity. A single nest can contain up to 40 eggs, but only 20 can be successfully incubated. An unexplained instinct allows the top hen to identify her own eggs and she discards alien surpluses first to reach the optimum number.

### Keeping a Low Profile

Ostriches don't really bury their heads in the sand. But to "disappear" from view, the grey-brown female ostrich sometimes lays her head and neck on the ground, keeping perfectly still.

### Shell Game

Ostrich eggs are the largest of bird eggs and have the most robust shells. Unlike any other bird, ostrich parents carefully pre-crack soon-to-hatch eggs with their breast bone.

### Fowl Play: How I Trained **My Avian** Co-workers



To begin raising my own ostriches, I obtained three 10-week-old chicks from a small ostrich farm in western Bavaria, a place I knew allowed the young hatchlings to run free in the yard. I would be bringing them to a perfect outdoor "bird cage" near my home in Heidelberg provided by ostrich enthusiast Jürgen Gass. The huge grassy enclosure had abundant space for running, a gigantic sand bath for preening, and plenty of trees and shelters. Using young ostriches in my study was essential-I needed to gain their trust, which allowed me to trust them: a kick from a full-grown ostrich is powerful enough to kill a lion.

The irrepressible nature of the birds became immediately apparent. As I drove them from their birthplace to their new home in a cube-vanwith no barrier separating driver from cargo—the chicks did not sit down and enjoy a tranquil ride. There was squealing, hair-pulling, and radical destruction of my sunglasses.

When the birds settled into their new home, each day I engaged them in playful training, observed them, and simply spent time with them. Before long, individual personalities

emerged. The calmest and friendliest was Tiffy, named after the Big Bird character in the German edition of Sesame Street. She would stick close to me even if the other girls ventured off to pluck leaves or befriend the older ostriches. Frida shared an opinionated state of mind with her namesake, artist Frida Kahlo, and sometimes tried to boss me and the older birds around by hissing at us. I would immediately yell "Stop it!" "Hissing back" was important: one does not want to give the illusion of control to a 2.5-metre-tall bird. But I would then pet her on the back and we were friends again. Cheeky Zora, with her reddish plumage, resembled the character Red Zora, an audacious red-haired heroine from a well-known German tale. She would sneak up behind me and beak-pinch my ear, then race away. She also loved to "zip" the zipper of one of my sweaters, sometimes for several minutes at a time.

During the first two years, my young ostriches spent the nights protected in their shelter. At sunrise, I would open the gates and be rewarded with an amazing spectacle: The Dance of the Ostrich. The birds would race out, zigzagging throughout the enclosure with elaborate pirouettes, curtseys, and effusive wing flutter. The Dance, accented with extreme turns at high speed—often using me as the pylon—was a mix of morning exercise, coordination development, and unbridled fun.

After these gymnastics, breakfast was served: a diet of wild-grass and special grain-mineral mix. During daily training sessions. I moved throughout the enclosure with the ostriches in tow, acclimatizing them to me and the training ground in preparation for my experiments. To attract their attention, I carried a rubber-chicken squeeze toy. For extra fun, we played "beakball." I would toss the squeaky toy into the air for a "player" to snatch, and,

with a whip of the bird's head, the chicken again took flight, terrorized by a swirl of striding legs and outstretched necks. The game was on!

Despite their charm, ostriches are difficult to train. "Sit" or "fetch" simply will not happen with these independent animals. The most I could hope for was having them perform their natural behaviours in a place I had determined. Over the years, though, I was able to establish a series of rudimentary signals. A high trilling sound (similar to that of young ostriches) compelled them to come to me. During episodes of mock-combat, which could become rather ferocious, a loud shout of "Stop!" would disentangle the birds.

It was also important to consider one's wardrobe. Consistently wearing blue—a neutral colour not confused with competitors in the ostrich brain-increased the birds' confidence. Once another employee fed the ostriches and, despite our warnings, he wore black coveralls—the colour of male ostriches. Maxi, Jürgen's dominant male, took offence and ran the

Upper left: Faceto-beak observation at very close range provides more smile than insight.

Right: While a canary is happy bathing in a spoonful of sand, this wouldn't do for a beautyconscious bird 25,000 times larger. Wings are used to shower the body with the granular skin-and-feather scrub.

poor man over. No kick, just a solid bulldozing resulting in three broken ribs. Blue is good.

When my birds reached 3 years of age, I began to introduce them to the "experimentation corridor." The nosy ostriches easily followed me inside to see whether "upright biped" had found something of interest. After awhile, I would allow only one ostrich at a time into the corridor while I walked or ran within it. This became a game to them, but when they got bored, I would fetch the Red Bucket, a very important tool that signalled "food delivery."

The time I spent with Tiffy, Zora, and Frida was the most exciting and rewarding part of my PhD studies. I often recall the first months when I would sit in the straw, easing them to sleep with fluffy heads cradled in my lap, and cold winter days when they would lift their wings to let me warm my hands on their thighs. Now, as semi-retired science graduates, they enjoy leisurely days, they have the run of the roost, and they've started laying their first eggs.



### Ostriches and History

### Africa 10,000 to 5,000 BCE

Ancient Saharan rock carvings depict these birds, which are still hunted for their meat, skin, and feathers. The petite Kalahari Bushmen manage this dangerous task by perfectly mimicking their prey in posture, behaviour, and costume.

### **Ancient Egypt**

The ostrich was codified in the Egyptian hieroglyphic system and appears in ancient texts and frescoes. Because of its symmetry, the ostrich feather was considered a symbol of justice, and became the ensign of Maat, the goddess of truth.

### **Ancient Greece**

Greek explorers, who encountered ostriches on their journeys through the Middle East, provided the modern scientific name for this bird: "Struthio camelus," meaning "camelfooted sparrow"—a satirical juxtaposition.

### **Ancient Rome**

In Rome, the sense of humour was darker. Ostriches served as the opening act in the Circus Maximus before the real stars—the gladiators-took the stage. The birds were beheaded for the masses to enjoy the spectacle of the headless animals scurrying in confusion.

### **Medieval Europe**

Hundreds of years before the first zoos were established. travelling merchants profited handsomely from exhibiting live ostriches. The birds' imposing presence inspired many innkeepers to name taverns after them

### 18th-Century Europe

Marie-Antoinette, the French Queen and fashion maven, used ostrich feathers on her headdress for a time. Naturally, this accessoire de mode became de rigueur for the aristocracy of 18th-century Europe.



### How the Ostrich Got to Africa

Until a few thousand years ago, ostriches weren't found solely in Africa as they are today, but lived throughout Asia and at the edges of Europe. In fact, the oldest ostrich fossil found in Africa is only 20 million years old, but molecular evidence indicates that this bird diverged from its closest relative more than 60 million years ago. The current theory poses that the ostrich's ancestor rafted on India when the supercontintent Gondwanaland broke apart. Once India collided with Asia, the bird walked throughout the Old World, eventually ending up in Africa, via the land link with Arabia.

The ostrich's closest living relatives, the rheas, emu, cassowaries, kiwis, and tinamous, are found in the New World or islands of the southern hemisphere—and it's likely that they, too, rafted away on their own pieces of the former Gondwanaland.

**OLIVER HADDRATH** is a technician in the Ornithology section of the ROM's Department of Natural History.

### PRACTICAL APPLICATIONS

This study has gone a long way to further our understanding of how the ostrich runs so fast for so long. Now that we understand these biomechanical strategies, perfected over 60 million years of evolution, we may be able to adapt them in modern technologies such as bipedal robotics, suspension systems, and joint-stabilization engineering. Already, some of my findings have inspired developers of "intelligent" human prostheses to adapt features of ostrich legs and toes, which may allow amputees a wider range of function and manoeuvrability.



### THE NEXT STEP

Since the ostrich is far too heavy to fly, scientists have long assumed that its wings are used only as a parasol for shade-seeking chicks and to make a powerful impression during courtship. But in the years we worked together, my avian subjects revealed that during swift turns, the birds rapidly extend one wing, which works like an air-rudder to assist in changing direction. And when coming to a sudden stop from breakneck speeds, an ostrich spreads both large, densely feathered wings to engage a "brake chute" similar to those used by dragsters. It will be intriguing to see what turns up from my next study—which looks at wing function.

### I WANT MY CAP BACK!

Armed with what you've learned about the swift ostrich, you may have suspected that I-a comparatively short-legged, big-footed biped—was not likely to retrieve my head covering. As a gracious provider, though, Nature tends to balance each shortcoming with an advantage. Homo sapiens's two handy forelimbs and impressive brain can be of utmost help in tricky situations. In my case, I had to come up with something that would a) attract more attention than my cap and b) render the turbo-prankster approachable. My secret weapon was the thief's favourite snack: corn. I loudly filled the Red Bucket with yellow gold and casually sauntered back to the scene of the crime. There stood the thief, already waiting at the gate, beak wide in anticipation, my cap carelessly discarded on the ground. Warm head, full belly. Tie game. o

### ACKNOWLEDGMENT

My interdisciplinary research included collaborations with ornithologists at the ROM, morphologists at the Senckenberg Research Institute, Frankfurt, and the University of Heidelberg, and biomechanics specialists at the University of Antwerp.

Left: Hot-footed and hot-headed. Zora is the cap thief. Although a woollen hat suits ostriches can endure very low temperatures: -10°C at night is not uncommon in some regions of Africa.



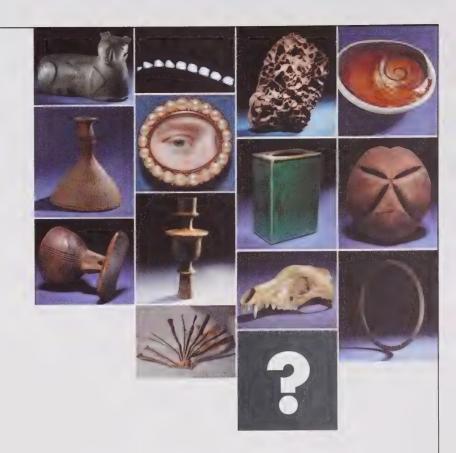
### October 22, 2010

Join us for a fun-filled night of deception and deduction at the Museum. Enjoy a sumptuous buffet and bar, meet ROM curators, and play a hilarious guessing game to determine the authenticity of rarely seen objects from the ROM vaults.

Tickets are \$250 each and available online at www.rom.on.ca/factorfiction

For more information, please contact Diana DiFrancesco at 416.586.5772 or dianad@rom.on.ca

Match wits with ROM experts, support curatorial research, and compete for a fabulous trip!





Above: In sticky Toronto summers, asthma and other health problems skyrocket. Enwave's Deep Lake Water Cooling System is like a breath of fresh air in the city.

oronto has always enjoyed the benefits of the Great Lakes, from transportation and fisheries to recreation and abundant drinking water. The "lake effect" from these massive bodies of water regulates Toronto's climate, burdening us with snow in winter but keeping us cool in summer. Recently, Toronto has found an innovative approach to make use of Lake Ontario's cold water that can only be described as, well, cool.

Since 2004, three gigantic pipes, stretching 5.5 km out into the middle of Lake Ontario and 80 metres down into the frigid 4°C depths, have been transporting cold water to the city. You might think this is nothing special. Toronto has always had cold tap water. But this water is not just for drinking. Its main function is actually air conditioning office complexes, sports facilities, and government buildings in Toronto's downtown core.

Known as Enwave's Deep Lake Water Cooling (DLWC) system, the technology is getting international acclaim for its ingenuity; but it is also incredibly green, decreasing Toronto's electrical demand and reducing greenhouse gas emissions. The system started out by cooling the Air Canada Centre, the Metro Toronto Convention Centre, and the Royal Bank Plaza and rapidly

expanded to include Toronto City Hall, the Ontario Legislature, Mt. Sinai Hospital, and Police Headquarters. There are now more than 60 office buildings connected to the system and another five are in the process of converting. At full capacity, an estimated 100 office towers could be supplied.

Interest in DLWC is actually not new. In the early 1980s the project was considered by Toronto City Council. And although councillors agreed that it was a great idea, a major private investor could not be found, and the project went nowhere. More than 20 years later, Enwave Energy Corporation was formed by a financier with a vision, who recognized the potential of DLWC. Today, Enwave is a registered Ontario Business Corporation with two shareholders: the City of Toronto and the Ontario Municipal Employees Retirement System.

One of the coolest things about Enwave's DLWC is that Lake Ontario's water is not being

drained to provide this air-conditioning service; only its coldness is being used. As water piped from Lake Ontario comes into the John Street pumping station via the Toronto Island filtration plant, it passes through heat exchangers that extract the icy 4°C temperature from the water. Once it has lost its cool, the water rises in temperature to about 13°C and it becomes part of the city's potable water supply.

A separate closed-loop system is strictly dedicated to air conditioning. The water in that system passes through the same heat exchangers and picks up the coldness extracted from the lake water. The closed-loop water temperature falls to about 4°C and is then supercooled to 3°C before being sent to Enwave's customers for air conditioning. When the warmed water returns from customers back to the pumping station, its temperature is around 13°C and the cycle repeats: warmed water from Enwave's customers passes through heat exchangers, exchanging heat for cold from the lake's icy depths, and then re-circulates to cool buildings in the downtown core.

Toronto's Enwave DLWC is the world's largest lake-source cooling system. It's hard to imagine why, given the remarkable benefits: the service is cost-efficient, sustainable, clean, and renewable. It's the largest renewable energy project in the world, and provides Toronto residents with improved drinking water that is both cleaner and colder. It reduces electricity usage by 90 percent compared to traditional cooling systems. Greenhouse gas emissions are reduced 79,000 tonnes annually by displacing coal-fired electricity (the equivalent of taking 15,800 cars off the road). Seven hundred million litres of water have been saved each year by removing conventional cooling systems. Older refrigeration units, which contribute 45,000 kg of polluting CFCs (Freon) annually, significant contributors to ozone depletion, are now being decommissioned. And there is no waste heat going back into Lake Ontario, which could potentially harm aquatic life and promote algal blooms.

Too often Toronto is caught in steamy summer heat waves with high smog levels that block out our skyline, and as air becomes harder to breath, health problems such as asthma skyrocket. The Ontario Medical Association estimates that the health cost of air pollution in Ontario is more than \$1 billion every year. Enwave's



pipes being

towed by a tug-

into Lake Ontario.

Deep Lake Water Cooling system is like a breath of fresh air being pumped into the city. Torontonians can now enjoy Ontario's lake effects from the comfort of their office chair or at their next sporting event.

The city's water initiatives don't stop with Enwave's Deep Lake Water Cooling system. New water-filtration technologies developed in Toronto are being sold on the global market to aid countries with little or no clean drinking water, never mind air conditioning. These new initiatives will be highlighted in an upcoming ROM exhibition, Water, which opens in March 2011. This highly interactive exhibition promises to be a must-see event.

After all, as the essence of life on Earth, water soothes and sustains us from birth to death. Cultures around the world draw on its properties for rituals and ceremonies. But its supply is finite. Careful stewardship is critical to maintaining a balance for the future of all species on Earth. o

MARY BURRIDGE is assistant curator in the Ichthyology section and KIM TAIT is associate curator in the Mineralogy section of the ROM's Department of Natural History.

### HOW DEEP LAKE WATER COOLING WORKS

### 1 ISLAND **FILTRATION PLANT**

Three intake pipes draw 4°C water from Lake Ontario at a depth of 83 metres. The water is then filtered and treated for the City's potable water supply

### 2 ENWAVE ENERGY TRANSFER STATION

At the ETS, the icy cold water is used to cool Enwave's closed chilled water supply loop through 36 heat exchangers. The ETS is adjacent to the City of Toronto's John Street Pumping Station.

### **3 ENWAVE SIMCOE STREET COOLING PLANT**

Chilled water can bypass the cooling plant and continue to the customer building. If necessary, water can be further chilled by two 4700-tonne steam-driven centrifugal chillers.

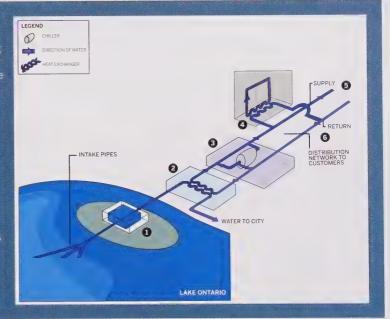
### **4 CUSTOMER SITE**

Heat exchangers at the customer building cool the internal building loop, providing chilled water for the building cooling system.

### **5 CHILLED WATER SUPPLY TO** OTHER CUSTOMERS

Enwave chilled water loop extends to other buildings

6 Chilled water is returned to the **Enwave Energy Transfer Station** to repeat the cycle



### Fun Facts:

### Aye Teeth

A species of lemur native to Madagascar, the aye aye has only 18 teeth, the fewest of any primate. The . average adult human has 32!



Above: Summer Club. During Toronto's steamy summer, kids enjoyed ROM Summer Club programs

themed from dino hunters to ROMic books. See Let's

ROM for fun fall and winter programs.

Honey bees have bodies that are specialized for carrying pollen. They even have pollen baskets on their hind legs!



### **Under Wraps**

Mummified falcons were a popular offering in ancient Egypt, but the birds were sometimes hard to come by. X-rays show that many "falcon mummies" are actually bundled twigs in beautiful wrappings



### Serfs Up

In 400 BCE, the Greek city of Sparta had only 8,000 citizens but



dead tissue, and fish with parasites come to my cleaning station on the reef—they even let me clean inside their mouths without eating me. ANSWER: I'm a scarlet cleaner shrimp and I live among reefs in the Red Sea and the tropical Indo-Pacific. My favourite foods are parasites and

# **Red Alert**

# Bright new must-have treasures from China

BY DENISE DIAS

The Warrior Emperor and China's Terracotta Army has conquered the ROM boutique with an army of scarlet, ruby, and cherry-coloured merchandise that brilliantly reflects the rich culture of a country with thousands of years of history.

Modern style meets ancient legend in the store's smart selection of red-hot home accessories and décor items inspired by the Terracotta Army. Porcelain warrior figurines, fine paper goods, and stunning silk scarves all make memorable mementos of this landmark exhibition that highlights one of the greatest archaeological finds in history: the Terracotta Army of the Warrior Emperor Qin Shihuangdi. o

**DENISE DIAS** manages communications for the ROM Governors Office. She is a regular writer for Shedoesthecity.com and Toronto Life's style section.



#### 3. CHINESE PILLOW BOX

Pillow boxes were traditionally used by travellers to safeguard valuables during the night. This decorative red leather box makes an elegant display or storage piece. \$99.99

Why we love it! The antiquelooking surface is handcrafted



# 1. CHINA STYLE

Calling all sinophiles! Add some culture to your coffee table with this breathtaking photography book illustrating some of China's most exceptional and iconic interiors.

#### \$14.99

Why we love it! It's full of will instantly stimulate and wellbeing.



#### 2. THE WARRIOR EMPEROR AND CHINA'S TERRACOTTA ARMY GUIDE

Enhance your experience of the exhibition with your personal copy of the exhibition guidebook. Learn about the rise of the Chinese Empire and the excavations that unearthed the terracotta warriors. \$5 (tax included) Why we love it! Authored by the ROM's

All items listed on this page are available at ROM Museum Store

Store Hours: 10 am to 6:30 pm, except Friday 10 am to 10 pm. Kids Store: Monday to Sunday Noon to 4 pm. Check out our online



#### 4. TEA CUP

Curl up with a hot cup of Chinese green tea and sip in style from this gorgeous jadecoloured mug with traditional red accents. \$9.99

Why we love it! A removable strainer makes it easy to master the art of a perfectly steeped serving of tea



#### 5. KNEELING ARCHER FIGURINE

Crouching in the ready position, this glossy red figurine of a kneeling archer from the Terracotta Army is poised to defend your mantelpiece or desk

Why we love it! It's a bold



#### 7. CHINESE PAPER **PARASOL**

This vintage-inspired handmade paper parasol is both fun and functional—use it (delicately) as a fashion accessory or a lighthearted home décor item. \$16.99

Why we love it! It makes a great gift or perfect party prop.



Why we love it! This versatile piece will dazzle in any traditional or modern space





# FOR OUR nembers



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#### FREE FOR MEMBERS

ROM MEMBERS RECEIVE **UNLIMITED FREE ADMISSION** TO THE WARRIOR EMPEROR AND CHINA'S TERRACOTTA ARMY.



ROM MEMBERS' MESSAGE

# A Developing Partnership

The ROM seeks new ways of communicating with Members

Oppressive heat, incredible food, and a myriad of enlightening lectures and round-table discussions: In brief, my experience at a museum membership conference held June 2010 in New Orleans.

The conference was a great opportunity to meet with and learn from peers at the top institutions in North America, including MoMA, the Smithsonian. the American Museum of Natural History, and the U.S. National World War II Museum (which has a membership base of 120,000 households). These are the behemoths, but in many regards, the ROM is well ahead in what we provide our Membersfrom e-communications and the onsite Member Information Kiosk to the special Members-only behind-the-scenes presentation on the making of a blockbuster (which is now available as a podcast at

rom.on.ca/members/behind-the-scenes)

One of the most interesting speakers was Arthur Cohen, a leader in understanding how to engage cultural audiences. As principal of LaPlaca Cohen a strategic marketing, advertising, and design firm

based in New York—Arthur has been working with the ROM for more than two years and his overarching message was that membership is a partnership. He likened the museum-member relationship to Fred Astaire and Ginger Rogers. Each brought a set of unique attributes which, when combined and exchanged, created magic on the dance floor.

This "equity exchange" is just as important between you, our Members, and the ROM. We have been moving beyond the basic benefit of free admission and will continue to develop ways to open two-way communication and a sense of belonging, of community, for ROM Members. Currently, we are working on redeveloping our Web site, which will feature a Members-only section, allowing you to connect more directly to the ROM and the work we are doing around the world. We will also be developing communication forums that will link you not only to the ROM, but to other Museum Members with like interests.

In the words of Arthur Cohen, membership should be defined "as a dynamic, dialogue-based community of shared experiences and ideas, hosted by and accessed through the museum." Already, we are implementing new channels for two-way communication and will continue to find new ways to share experiences with our Member partners. Together, we will light up the dance floor.

**CHUCK THIBEAULT** HEAD OF MEMBERSHIP

PS: As always, you can contact me directly at chuckt@rom.on.ca

Individual: 1 year \$97; 2 years \$172 Family/Dual: 1 year \$149; 2 years \$269 Non-Resident: 1 year \$102; 2 years \$183 Student: \$54

MEMBER INFORMATION

MUSEUM MEMBERSHIP RATES

Explorers: \$15 (in addition to ROM Membership)

Curators' Circle: \$189 Museum Circle: \$323 Director's Circle: \$626

Young Patrons' Circle: Single \$600;

Dual \$1,000

Royal Patrons' Circle: \$1,500+

#### TELEPHONE NUMBERS

Membership Services: 416.586.5700 Switchboard: 416.586.8000 Bell Relay Service: 711 School Groups: 416.586.5801 Museum Volunteers: 416.586.5513 ROM Museum Store: 416.586.5766 c5 Restaurant/Lounge Members Reservation Line: 416.586.8095 Donations: 416.586.5660

Attention Members: Your privacy is important to us. The Royal Ontario Museum (ROM) and the ROM Governors (the ROM's charitable foundation) share a special relationship and you may receive additional information from each. If you do not wish to receive it, contact membership@rom.on.ca or or call 416.586.5700.

Occasionally, we make our list of supporters available to other carefully screened curatorial organizations and selected groups that may be of interest to you. Please understand that by allowing us to exchange your name, you are helping us support the ROM's education and research mandates. If you prefer not to have your name exchanged, please contact us at membership@rom.on.ca or at 416.586.5700

The ROM Membership Department operates a telemarketing office. Should you prefer not to be contacted by telephone, please contact us at the e-mail address or phone number listed below and we will have your number removed from our list.

Membership: 416.586.5700 membership@rom.on.ca rom.on.ca/members

#### ROM BOARDS

PATRONS The Right Honourable Michäelle Jean, C.C. C.M.M. C.D. Governor General of Canada; The Hon. David C. Onley, O.Ont, Lieutenant Governor of Ontario / BOARD OF TRUSTEES Sal Badali (Chair). Ann Dumyn (Vice-Chair), Elyse Allan, Bonnie Brooks, Danuta Buczynski, Ronald Graham, Paul Haggis, Christopher Jamroz, Won Kim, Elsie Lo, Barbara Milstein, Marilyn Pilkington, Colin Saldanha, Barbara Stymiest, Atul Tiwari, Carol Wilding, Judith Wolfson / EX-OFFICIO Janet Carding, Dr. David Naylor, Jack Petch / BOARD OF GOVERNORS W. Robert Farquharson Carol Wilding, Judith Wolfson / EX-OFFICIO Janet Carding, Dr. David Naylor, Jack Petch / BOARD OF GOVERNORS W. Robert Farquharson (Chairman), Linda Hasenfratz (Vice-Chair), Shreyas Ajmera, Dr. Marie Bountrogianni, Rudolph Bratty, G. Raymond Chang, Jack Cockwell, Michael Detlefsen, Gwen Harvey, Jennifer Ivey Bannock, Michael Lee-Chin, Donald R. Lindsay, Rebecca MacDonald, James W. McCutcheon, Dr. Jack M. Mintz, Peter Oliver, Robert E. Pierce, Elizabeth Schad, Simona Shnaider, (Joseph) Joey M. Tanenbaum, C.M., James Temerty, C.M., Rita Tsang, Harriet Walker, V. Prem Watsa, Richard S. Wernham, Alfred G. Wirth / EX-OFFICIO Janet Carding, Jack McOuat, Salvatore Badali / HERITAGE GOVERNORS Jack McOuat (Chair), Robert D. Brown, Fredrik Eaton, O.C., O.Ont., Robert Gillespie, Ned Goodman, Kenneth W. Harrigan, Patricia Harris, Richard M. Ivey, C.C., Q.C., Hon. Henry N.R. Jackman, Thomas Kierans, Elsie Lo, Susanne Loewen, Stephens B. Lowden, Brenda McCutcheon, Frank Milligan, Dixie-Anne Montgomery, Frank Potter, Joan Randall (past Co-Chair), Wendy Rebanks, Flavia Redelmeier, John A. Rhind, Donald M. Ross, Joan Thompson (past Co-Chair), Lynton R. Wilson / SENIOR STAFF Janet Carding (Director and Chief Executive Officer), Glenn Dobbin (Deputy Director, Chief Operating Officer, and Secretary to the Board of Trustees), Mark Engstrom (Deputy Director, Collections and Research). Dr. Marie Bountrogianni (President and Executive Director, Officer of the PDM Governors) (Deputy Director, Collections and Research), Dr. Marie Bountrogianni (President and Executive Director, Office of the ROM Governors).

#### **NEWS & PROGRAMS**

# Win a Trip to China

#### In celebration of

The Warrior Emperor and China's Terracotta Army, Tour East Holidays and Cathay Pacific Airlines are pleased to offer ROM Members an exclusive chance to win a trip for two to China.

Enter today at travelife.ca for your chance to win a trip to see the First Emperor's Terracotta Army where it was created 2,200 years ago-Xi'an,



Prize for 2 includes: 7 nights accommodation; visits to Beijing, Xi'an, and Shanghai; breakfasts and lunches; business class airfare. Value of the trip is \$15,000 per person. Contest ends October 31, 2010.







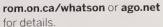
# Free Admission to the AGO for ROM Members

#### TWO DAYS ONLY

On Saturday, October 2, and Sunday, October 3, 2010, ROM Members will receive free admission to

the AGO, including access to the Norma Ridley

Members' Lounge, discounts at the shop and café, and free coat check. A valid ROM membership card plus ID must be presented at the AGO admission desk. Go to





### McMichael Canadian Art Collection

#### SATURDAY, NOVEMBER 6, 2010

For one day only, ROM Members are invited to enjoy general admission to the McMichael Canadian Art Collection free of charge. A valid ROM membership card plus ID must be presented at the admission desk to take advantage of this offer. For details, go to rom.on.ca/whatson.



### Gardiner Museum

#### 2-FOR-1 ADMISSION FOR ROM MEMBERS UNTIL DECEMBER 31, 2011

ROM Members will receive 2-for-1 admission at the Gardiner Museum plus a 10% discount at the Gardiner Shop from now until December 31, 2011. Please present valid ROM membership card(s) at the Gardiner Museum admission desk.



### ROM Explorers' Club Event

Bring your Explorers for an exciting exploration of China with tons of fun crafts, activities, and more. This free event is exclusively for Explorers' Club Members.

Saturday, October 2, 2010, 10 am to 2 pm Canada Court, Level 1

Registration is required. Go to rom.on.ca/whatson or call 416.586.5700.

#### **Want to Become** an Explorer?

This fun club for children ages 4 to 11 offers a stampable personal passport to cool events, fun newsletters, and more.

Available for ROM Members only. Cost: \$15 per child per year.

Visit rom.on.ca/explorers or call 416.586.5700.

# Family Gathering

SUNDAY, DECEMBER 5, 2010, 10:30 AM TO 3:30 PM Museum Circle, Director's Circle, Royal Patrons' Circle, and Young Patrons' Circle Members mark your calendars. You are invited to the ROM for some family holiday fun. Kids will enjoy a scavenger hunt, festive treats, and more. Invitation is for 4 adults and 4 children (one must be a cardholder). Not transferable.

Registration is required. Go to rom.on.ca/events or call 416.586.5700.

Upgrade to one of the above membership levels to join us at this fun holiday event. Visit rom.on.ca/members or call 416.586.5700.

# Wrap Up the ROM

#### MEMBERSHIP IS THE PERFECT HOLIDAY GIFT

Give the gift that gives all year long! Your friends and loved ones can enjoy the Museum's treasures long after the holiday is over. ROM Members save up to \$20 on gift memberships. For details, visit rom.on.ca/members or call 416.586.5700.



#### **NEWS & PROGRAMS continued**



# Contemplative Space Renamed in Honour of Thorsell

In June, at a formal reception, the Spirit House was officially re-named the Thorsell Spirit House in honour of outgoing director and CEO William Thorsell. This special space, located at the heart of the Michael Lee-Chin Crystal, serves as an accessible public place for reflection and contemplation, and the ROM Trustees and Governors felt it only appropriate that Thorsell—who inspired staff to reach higher and dream bigger—should be remembered in this wonderful way.

# Friends Events

#### **Friends of Textiles & Costume**

Costume on Stage

This instructive morning event will take participants through the process of costume creation from the director's original concept to the actual garment worn on stage. You'll also see costume in motion worn by dancers from Opera Atelier. Speakers: Marshall Pynkoski, Opera Atelier coartistic director and founder; designer Martha Mann, who created the costumes for Opera Atelier's recent production of The Marriage of Figaro; and costumier Rita Brown of the Shaw Festival and Papiers à la

Saturday, September 25, 2010, 10 am to 1:30 pm Signy and Cléophée Eaton Theatre, Level 1B ROM & CSO Members \$35; general public \$40; students with ID \$15

Pre-registration required. Call 416.586.5797 or go online at rom.on.ca/whatson.



FRIENDS OF TEXTILES & COSTUME



OPERA 10 ATELIER 11 Son

#### Friends of the Canadian Collections (FCC)/ **Amis des collections** canadiennes (ACC) Life in Crisis—Again

The current global crisis is not the first in Earth's history. This lecture will review the possible causes of the past five great extinctions, and their application to the present. Afterwards, a tour of the Life in Crisis: Schad Gallery of Biodiversity will demonstrate how biodiversity and First Peoples' traditional knowledge is being combined with science to address today's environmental issues.

Speakers: Dr. Allan Baker and Dr. Kevin Sevmour

Tuesday, November 16, 2010, 2 pm to 4:30 pm Thomas Kierans Boardroom, Level 2, Louise Hawley Stone **Curatorial Centre** FCC Members \$30: general public \$35: students with valid ID \$15 To register, call 416.586.5797 or

go online at rom.on.ca/whatson.

## Terracotta Warriors Lecture Series

All lectures begin at 7 pm in the ROM's Signy and Cléophée Eaton Theatre.

Price per lecture: \$28, ROM Members and students \$25. Choose any 4 lectures for \$84, ROM Members and students \$75. All 12 lectures: \$224, ROM Members and students \$200.

#### Tuesday, September 21 **Newest Sources of**

**Early Chinese History: Inscribed Bronze Vessels Recently Discovered** Edward L. Shaughnessy, University of Chicago.

#### Friday, September 24 Before the Empire: New Light from Early Qin Archaeology Li Feng, Columbia University.

Tuesday, September 28 Art, War, and the Afterlife: What Survives the Great Cataclysms and Why? Gary Geddes, winner of British Columbia's Lieutenant-Governor's Award for Literary Excellence in 2008.

#### Tuesday, October 19

State Power and Sovereignty: The Success of the First Emperor Dr. Roberto Ciarla, the National Museum of Oriental Art in Rome.

#### Thursday, October 21

Visualizing the Underground World as Conceived by the **First Emperor** 

Dr. Duan Qingbo, the Shaanxi Institute of Archaeology and leader of the archaeology team in the

Oin Emperor's Mausoleum. Note: This lecture is in Mandarin with English translation.

### Thursday, October 28

**New Light on Xanadu** John Man, British historian.

#### Thursday, November 4

The Garden of Curious Things: Science and Technology in China at the Time of the **Terracotta Warriors** Rick Guisso, the University of China.

#### Thursday, November 11

Use and Abuse: The Qin Dynasty in Later Histories Michael Nylan, author.

#### Wednesday, November 17 **China's Ancient Green Revolution** Gary Crawford, University of Toronto Mississauga.

#### Thursday, November 25 From Terracotta Army to

Jade Suits: A Golden Age in **Chinese History** 

Carol Michaelson, the British Museum and the Museum of Far Eastern Antiquities, Stockholm.

#### Thursday, December 2 **Battle for an Empire**

Dr. Graham Sanders, University of Toronto.

#### Thursday, December 9 **Writing Fiction About China**

as a Foreigner David Rotenberg, author and artistic director of The Professional Actors Lab.



#### 2010 CHILEAN WINE FESTIVAL

Celebrate and savour the wines, sample authentic Chilean appetizers and enjoy live entertainment - a complete Chilean experience 7:00 pm - 9:30 pm all under one roof.

TUESDAY, OCTOBER 5

Royal Ontario Museum Peter F. Bronfman Hall



Proceeds will support the Royal Ontario Museum.

Tickets \$65.00 • ROM members \$52.00

Promo code: ROM member. Please note that this event is for invited guests only and that there will be no general admission at the doo

To register for this event visit us at www.winesofchile.ca











#### **NEWS & PROGRAMS continued**

# Korean Cultural Heritage Day

NOVEMBER 6, 2010, 10 AM TO 5:30 PM

Enjoy a full day of Korean heritage celebration with hands-on activities for kids, artifacts, music, dance performances, and more.

Purchase your ROM admission tickets online and save up to 25% off regular rates. Buy online at rom.on.ca and enter the promo code KOREA.



#### ROMTRAVEL

## Journey Through the Ages

#### FROM ANCIENT GREEK TEMPLES TO BAROOUE TOWNS, SICILY HOLDS THE TRACES OF HISTORY IN ITS PALM

The largest island in the Mediterranean, Sicily was long coveted by the region's major powers for its strategic position along ancient trade routes (it's the "football" being kicked by the boot of mainland Italy). The Greeks, Romans, Byzantines, Arabs, Normans, French, and Spanish have all ruled the island at one time, and today their cultural influences are still very much in evidence

Starting in the 8th century BCE, the Greeks began colonizing Sicily, and many of the world's best-preserved Greek temples are found here, including the UNESCO World Heritage site the Valley of the Temples in Agrigento and the evocative temples of Segesta and Selinunte. The ancient theatre of Syracuse was one of the largest in its day and the Villa del Casale, built in the 4th century CE, contains spectacular mosaic floors. Seven centuries later, the Normans also built richly decorated large churches, adorned with astonishing golden mosaics.

In 1693, an earthquake devastated the eastern part of the island, totally destroying many towns. The one blessing of this tragedy was that the rebuilding took place at the height of the Sicilian baroque style, and today the towns of Noto and Ragusa are considered baroque masterpieces.

The island's Arab legacy is retained in Sicilian menus and recipe books. Lemons, blood oranges,



almonds, and sugar, so closely associated with Sicilian cuisine, were all brought to the island by Arabs. The best way to try Sicily's exquisite cuisine is at an "agriturismo," where all ingredients are locally produced.

From ancient temples to the bustling city of Palermo, a trip through Sicily really is a journey through time. Join ROMtravel for an amazing Sicilian adventure. We'll also see awe-inspiring natural sights such as Taormina's gorgeous cliff-top setting and sea views, and Mt. Etna, a still-active volcano on whose slopes grapes are grown for many of Sicily's excellent wines.

> May 5-16, 2011 \$6,675 (includes all flight costs) For further information, contact ROMtravel at 416.586.8034, e-mail travel@rom.on.ca, or visit the website rom.on.ca/programs/rom\_travel.



#### **Upcoming trips**

Indochina January 8–26, 2011 Brazil February 12-26, 2011 **Egypt** February 13-27, 2011 Sicily May 5-16, 2011 China's Silk Road October 2011 New Orleans October 2011 India February 2012 **Ancient Maya Culture** February 2012

# For Our Members



Tuesday, June 22, 2010 The First Look











#### **EVENTS**

# Patron Preview of The Warrior Emperor and China's Terracotta Army

More than 400 Royal Patrons' Circle and Young Patrons' Circle Members welcomed the terracotta warriors to Toronto at a special preview and joint event at the ROM to celebrate the landmark exhibition The Warrior Emperor and China's Terracotta Army brought to the Museum courtesy of generous support from presenting sponsor, the Robert H. N. Ho Family Foundation and lead sponsor BMO Financial Group.

Representing one of the most remarkable archaeological finds in history as well as the ROM's most accessible exhibition ever, The Warrior Emperor and China's Terracotta Army was a highly anticipated opening at the ROM. Showcasing 10 life-sized terracotta warrior figures, including a horse, two generals, and an archer, in addition to a number of other artifacts that have never before left China, the exhibition wowed and delighted guests.

Dr. Marie Bountrogianni, president and executive director of the ROM Governors, thanked RPC and YPC Members, as well as presenting sponsor The Robert H. N. Ho Family Foundation, lead sponsor BMO, and all other supporting sponsors for their generous assistance in bringing the warriors to the ROM. Museum Patrons and sponsors were among the very first guests to view the ground-breaking exhibition. The evening concluded with a celebratory cocktail reception in the Hyacinth Gloria Chen Crystal Court.

If you would like more information about RPC or YPC, please call 416.586.5842.

Clockwise from top left: Diana White and friends; William Thorsell; I-Cheng Chen, Jasmine Lin, and friend; Kathie Gayda, Adam Gayda, Jocelyn Symons, Dustin Jenner, and Luis de Castro; Elizabeth English and guest.

### FROM THE

# rom governors A message from our President

#### FALL INTO THE ROM: A renewed commitment to learning



**September marks the beginning** of one of the busiest times of year with the hustle and bustle of the back-to-school season and the hectic holidays just around the corner. At the ROM, we feel inspired to renew our commitment to learning and to provide our visitors with new and exciting ways of sharing information in our galleries, especially during the program-rich months of fall and winter.

With this season's launch of our RPC and YPC programs later this month, we are gearing up for a robust calendar of exclusive fundraising events, including an evening with El Anatsui and a special viewing of the exhibition El Anatsui: When I Last Wrote to You About Africa at the ICC's annual Culture Shock fundraiser on September 29, 2010. Patrons, donors, and guests can also test their knowledge in a game of wits against ROM curators at the 14th annual Fact? or Fiction? event on October 21, 2010, in support of ROM research. There has never been a better time to join RPC at the ROM, with the new transferable RPC membership card, which allows you to share your patron privilege of unlimited access to the Museum with friends and family.

As a world-class cultural institution with hundreds of thousands of important artifacts, the ROM plays a vital role in preserving and sharing the world's history for generations to come. Our goal to foster life-long learning and an appreciation of natural history and world cultures goes hand-in-hand with a passionate belief that the ROM should be accessible and enjoyable to all visitors.

Thanks to generous support from an anonymous donor, we are making great strides in the area of accessibility with the launch of Tactile Tours for visitors who are blind or have vision loss, and American Sign Language (ASL) English Interpreted Tours for visitors who are deaf, deafened, or hard of hearing. We're also proud to present *The Warrior Emperor and China's Terracotta Army* as the most accessible exhibition in the Museum's history.

Supporting the ROM is also more accessible than ever before with our new mobile giving option, which allows anyone to make a \$10 donation that will send a child to the ROM simply by texting ROMKIDS to 30333 from any mobile device.

Each year, thousands of students from across Canada discover treasures in the Museum's classrooms, where teachers use artifacts and specimens to spark curiosity and interest. In the spirit of the back-to-school season, we invite you to participate in extending these educational opportunities by supporting an endowed educator position at the ROM or giving a gift in support of classroom collections and enhancements.

We are also beginning the fall season by welcoming a new director and CEO to the ROM. Janet Carding has an extraordinary educational and professional background in museum work and is the first woman ever to be appointed director of the ROM. We are delighted that she has joined us and I warmly welcome her on behalf of the ROM Governors team and ROM Board of Governors.

For more information on our fun-filled fall at the ROM, including programs, fundraising events, and ways to donate, please visit **rom.on.ca/support**.





Above: Guests try to out-guess curators at the ROM's annual fundraiser Fact? or Fiction?



DR. MARIE BOUNTROGIANNI

PRESIDENT AND EXECUTIVE DIRECTOR, ROM GOVERNORS



Left: Dr. Marie Bountrogianni with RPC Committee member Anne-Marie Applin.



Left: Children gather for a lesson in the ROM's Rotunda.

# For Our Members

#### SUPPORT

# Young Patrons' Circle

YPC NOW SUPPORTS ROM RESEARCH AND OFFERS NEW GIVING LEVELS

#### Dear ROM supporters,

This year, the Young Patrons' Circle (YPC) celebrated its fifth anniversary. The first group of its kind in Canada, YPC has paved the way for so many of the young philanthropic programs that have launched in recent years.

The YPC is comprised of a wide variety of individuals, from 19 to 45 years of age, all with their own unique capacity to support the ROM. With this in mind, we are thrilled to announce three new YPC levels and five total ranges of annual giving, in order to allow Patrons to support the ROM in the way that is most meaningful to them.

Trailblazer (\$5,000 +)
Discoverer (\$3,000 - \$4,999)
Adventurer (\$1,500 - \$2,999)
Explorer (\$1,000 - \$1,499)
Voyager (\$600 - \$999)

In appreciation of their donations, Patrons receive invitations to 12 or more complimentary events per year and discounted tickets to PROM, our annual signature fundraiser. Those who renew their gift at one of the new levels will receive additional private access to ROM collections and more. For details, visit **rom.on.ca/ypc**.

We are also thrilled to announce that a portion of each YPC gift will now go to a new ROM Research Fund. In an effort to enhance the impact of your gifts to the Museum, each year the YPC will support a specific ROM peer-reviewed research project. The new YPC giving levels reflect our donors' ambition to be trailblazers in support of the ROM and its international research program.

Finally, YPC Patrons have new flexible guest privileges for complimentary general admission to the Museum. Each YPC membership is valid for ROM admission of up to four adults (including named YPC cardholders) and up to four children (under 18).

To learn more about the benefits associated with the new YPC giving levels, research project, or guest privileges, please don't hesitate to call the Young Patrons' Circle office at 416.586.8003.

Thank you to all YPC Patrons for your generous support.

Sincerely,

Diana Arajs Co-Chair, YPC Cabinet Michael Mallinos Co-Chair, YPC Cabinet





# Royal Patrons' Circle

# NEW PRIVILEGE FOR RPC MEMBERS—TRANSFERABLE CARDS

#### Dear ROM supporters,

In recognition and celebration of the Royal Patrons' Circle's 25-year history of philanthropy at the Museum, we are delighted to offer all RPC Members a new privilege: **transferable membership cards**.

What does this mean for RPC cardholders? All current and future RPC membership cards will be transferable for admission to the ROM. You can lend your card to a friend, relative, or colleague for admission to the Museum. They can also use your flexible RPC guest privileges to bring their own guests (up to four adults, including cardholders, and up to four children under 18).

This new benefit provides an opportunity to expand the Museum's Royal Patrons' Circle and we hope that you will share your membership card with those who may consider becoming more involved with the ROM as RPC Members.

RPC Members can take advantage of this new flexibility with unlimited access to the ROM's current blockbuster *The Warrior Emperor and China's Terracotta Army*. It's truly an exciting time to be a Member!

No action is required by RPC Members to receive these benefits—they take effect automatically. To join RPC today, please call our team at 416.586.5556.

To all past, current, and future RPC Members—thank you for your support.

Sincerely,

Harriet Walker Chair, RPC Committee

#### THANK YOU

It is our honour to thank and recognize those Royal Patrons' Circle donors whose passion for the ROM provides much-appreciated philanthropic support to the Museum's highest priorities.

# Benefactor (\$25,000 and above)

Gail & Bob Farquharson Barbara Milstein James & Louise Temerty Richard Wernham & Julia West Anonymous (1)

#### Guardian (\$15,000-\$24,999)

Jack L. Cockwell
John Hunkin & Susan Crocker
Alan & Patricia Koval
Brenda & James McCutcheon
Mr. Robert & Mrs. Elizabeth Schad
Anonymous (1)

# Guarantor (\$10,000-\$14,999)

Mr. & Mrs. Avie Bennett Mrs. Joy Cherry Weinberg Alan Greenberg Jennifer Ivey Bannock Dr. & Mrs. R. L. Josephson TD Bank Financial Group The Wookey Family Anonymous (1)

#### **SPONSORSHIP**

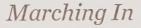
# Reaching Out and Giving Back

HSBC BURSARY OFFERS OPPORTUNITIES FOR STUDENTS AT UNDER-SERVED SCHOOLS

One in seven Ontario students visits the Museum each year through the ROM's School Visits—a program that includes admission, tours of the galleries, and interactive activities tailored to meet educational goals. Not every school has the good fortune to be able to offer this experience to their students. But thanks to the HSBC School Visits Bursary Program, 1,417 students from under-served schools in the Toronto District School Board were able to participate in this creative, hands-on learning experience last year. In fact, it was through HSBC's ongoing support for school visits that the ROM was able to establish its School Visits Bursary Program in 2005.

HSBC Bank Canada—a subsidiary of HSBC Holdings plc, one of the world's largest banking and financial services institutions—believes in giving back to the communities in which it operates. This is a big part of what makes them "the world's local bank." By offering students the opportunity to enhance their understanding and appreciation of art, history, cultures, and science at the ROM, the HSBC School Visits Bursary Program promises a brighter future for students by helping them build skills that range from literacy to problem-solving.





BLAKES HELPS BRING TERRACOTTA ARMY TO THE ROM

The ROM's blockbuster exhibition The Warrior Emperor and China's Terracotta Army, on display until January 2011, showcases one of the most significant archaeological finds in history: the 1974 discovery in north-central China of thousands of life-sized terracotta sculptures of Chinese warriors. These extraordinary figures were created 2,200 years ago during the Qin dynasty.

The show, which will tour Canada after its premiere at the ROM, was developed by the ROM's own Dr. Chen Shen, senior curator and Bishop White Chair of Far Eastern Art & Archaeology. Says Shen: "The exhibition's scope makes this the most significant display of the First Emperor's Terracotta Army ever showcased in North America." It's a major triumph for the ROM that couldn't have come together without support from organizations like exhibit patron Blake, Cassels, & Graydon, LLP.

For more than 150 years, Blakes has built a reputation as a leader in both the legal profession and the business community. A supporter of more than 135 charitable organizations, community agencies, and volunteer boards, Blakes knows what it takes to excel—in addition to being named one of Toronto's top employers in 2010, they were recognized as Canada's Law Firm of the Year in 2009 and 2010 by Who's Who Legal and, for the third year running, as Law Firm of the Year: Canada in the PLC Which Lawyer? Awards.







# Building the Future

#### GREAT-WEST LIFE, LONDON LIFE, AND CANADA LIFE BURSARY ENABLES STUDENTS TO VISIT THE ROM

"How did you make the ancient tomb so real?" marvelled one student after a tour of the ROM's Egyptian galleries. This kind of curiosity is so often sparked in young minds by a school visit to the ROM. Thanks to Great-West Life, London Life, and Canada Life, who generously supported the ROM's School Visits Bursary Program for a third year, more than 1,000 students from at-risk areas in the Toronto District School Board were able to enjoy a school visit to the ROM last year free of charge, an opportunity they may not otherwise have had. In the coming year, many more students will participate.

The Great-West Life, London Life, and Canada Life School Visits Bursary Program is made available through the companies' national corporate citizenship program, demonstrating their ongoing commitment to building Stronger Communities Together™. A visit to the ROM is a unique opportunity for students to learn about history first-hand through the Museum's many displays and artifacts. By building on and enhancing what students learn in their school curriculum, such visits help foster new learning. Students can ask questions about and discover the worlds of natural history and ancient civilizations meaningful lessons they will carry into the future.

# **Resurrection Song**

The unusual life cycle of these insects has long inspired the human psyche

BY CHRIS DARLING

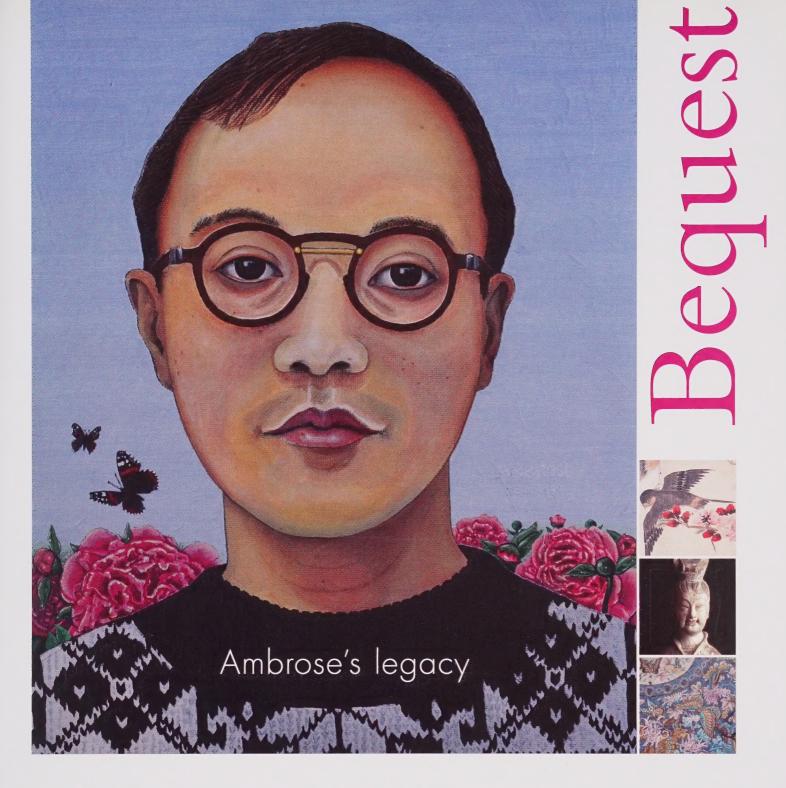


The most charismatic and identifiable of the Hemiptera—the insects with sucking mouthparts, the "true bugs"—are the cicadas. They are larger and noisier than their relatives, the aphids, scale insects, leafhoppers, and spittlebugs. For many of us, the ear-piercing whine of the male dog-day cicada, often wrongly identified as the hum of electric transmission wires, defines late summer. These calls are produced by males to attract females during the short above-ground portion of their lives.

But their calls are not the main reason cicadas have a special place in folklore. These insects spend the vast majority of their life cycle feeding underground, sucking sap from tree roots. Periodical cicadas in particular, appropriately named *Magicicada*, spend either 13 or 17 years (depending on the species) feeding, before "magically" appearing above ground. They emerge in huge numbers solely for the purpose of reproduction.

Their transformation from rather drab, grotesque grubs into brightly coloured winged insects has inspired the human psyche for centuries. Cicadas have been symbols of lifeafter-death, resurrection, rebirth, and immortality in cultures as distinct as the ancient Chinese and the Hopi Indians of the American southwest. During China's Han dynasty, it was customary to place a jade amulet made in the shape of a cicada on a corpse's tongue before burial—a symbol of hope for renewed life. o

**CHRIS DARLING** is senior curator in the Entomology section of the ROM's Department of Natural History.



# Gift Planning at the ROM

Ambrose Wah Hing Lo was proud of his cultural heritage and loved Chinese history, visual art, music, and opera. He would visit the ROM's Chinese collections to savour the serenity of the Buddhist temple wall paintings in the Bishop White Gallery of Chinese Temple Art. Ambrose died in 1999. In 2005, his partner created the **Ambrose Wah Hing Lo Endowment Fund** to support the acquisition of significant Chinese artifacts. Through this fund, Ambrose leaves a legacy of inspiration and hope that future generations will experience the same enjoyment he felt while gazing at the Chinese collections.





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